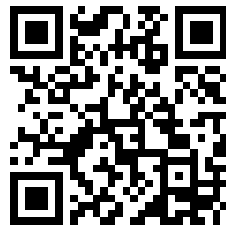


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4936



STORE AND OFFICES:
43 Jefferson Avenue.



PIPE AND STOCK WAREHOUSE:
204, 206 & 208 West Congress Street.

ILLUSTRATED CATALOGUE

—OF—

JAMES WALKER & SON

MANUFACTURERS AND DEALERS IN

Brass, Iron and Copper Goods, Etc.,

—FOR—

PLUMBERS, STEAM FITTERS, ENGINEERS, MACHINISTS AND
ENGINE BUILDERS.

STANDARD AND EXTRA HEAVY

WROUGHT IRON PIPE,

BLACK, GALVANIZED AND ENAMELED.

Malleable and Cast Iron Fittings for Steam, Water and Gas.

RUBBER HOSE, PACKINGS, GASKETS, ETC.

LEAD PIPE, SHEET LEAD AND METALS.

EARTHENWARE, MARBLE AND SANITARY SPECIALTIES.

43 Jefferson Ave., - Detroit, Mich.

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IN YEAR 1889, BY
JAMES WALKER & SON,
IN THE OFFICE OF THE LIBRARIAN OF CONGRESS
AT WASHINGTON, D. C.

TO THE TRADE.

We take pleasure in handing you our new ILLUSTRATED CATALOGUE AND PRICE LIST, which contains a very complete line of the best and most approved goods in our trades. We call your special attention to the Price Lists in this Catalogue, which are the MANUFACTURERS' STANDARD PRICE LISTS.

We thank you for your patronage extended to us in the past, and solicit a continuance of the same. Please note terms below.

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MONTHLY REMITTANCES UNLESS OTHERWISE AGREED.

REMITTANCES.—Par funds in Detroit or New York. We pay no exchange or express charges.

BOXING AND CARTAGE charged at cost.

All goods travel at purchaser's risk after shipping.

In ordering, specify Catalogue Number to avoid mistakes.

All prices subject to change without notice.

Yours very respectfully,

JAMES WALKER & SON.

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WROUGHT IRON PIPE,

FOR STEAM, WATER OR GAS.

Nominal Inside Diameter. Inches.		Price, Plain, Per foot.	Price, Galvanized Per foot.	Weight Per Running Foot.	Number of Threads to Inch Of Screw.	Actual Outside Diameter. Inches.
BUTT WELD.	1/8	.04	.05	.24	27	.40
	1/4	.04	.05	.42	18	.54
	3/8	.04	.05 1/2	.56	18	.67
	1/2	.05	.07	.85	14	.84
	3/4	.07	.09	1.12	14	1.05
	1	.09 1/2	.12 1/2	1.67	11 1/2	1.31
	1 1/4	.12 1/2	.17	2.25	11 1/2	1.66
LAP WELD.	1 1/2	.22	.25	2.69	11 1/2	1.90
	2	.28	.32	3.66	11 1/2	2.37
	2 1/2	.44	.49	5.77	8	2.87
	3	.58	.64	7.54	8	3.50
	3 1/2	.70	.86	9.05	8	4.00
	4	.85	1.00	10.72	8	4.50
	4 1/2	1.00	1.25	12.49	8	5.00
	5	1.20	1.50	14.56	8	5.56
	6	1.65	2.00	18.76	8	6.62
	7	2.00	.....	23.41	8	7.62
	8	2.75	.....	28.34	8	8.62
	9	3.70	.....	34.07	8	9.68
10	4.75	.....	40.64	8	10.75	
12	6.00	.....	54.65	8	13.00	

Pipe cut to specified lengths. 5 % gross discount higher than standard.

EXTRA FOR CUTTING THREADS.

Size, inches.....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
Price.....	5	5	5	5	5	6	7	8	10	15	20	25	35	45	55
Size, inches.....	6	7	8	9	10	12									
Price.....	.70	.85	1.00	1.25	1.50	2.50									

Pipe cut and fitted to Diagrams or Measurements.

WROUGHT IRON PIPE.

EXTRA AND DOUBLE EXTRA STRONG.

Nominal Size.	Actual Outside Diameter. Both X and XX Strong.	Actual Inside Diameter. X Strong.	Actual Inside Diameter. XX Strong.	Weight Per Foot. X Strong. Pounds.	Weight Per Foot. XX Strong. Pounds.	Price Per Foot. X Strong.	Price Per Foot. XX Strong.
$\frac{1}{8}$	.40	.20	.....	.40	.....	.08	.....
$\frac{1}{4}$	.54	.29	.....	.56	.....	.08	.....
$\frac{3}{8}$	.67	.42	.....	.75	.....	.08	.....
$\frac{1}{2}$	.84	.54	.24	1.16	1.38	.10	.20
$\frac{3}{4}$	1.05	.73	.42	1.61	2.32	.14	.28
1	1.31	.95	.59	2.32	3.25	.19	.38
$1\frac{1}{4}$	1.66	1.27	.88	3.19	4.57	.25	.50
$1\frac{1}{2}$	1.90	1.49	1.09	3.28	6.25	.44	.88
2	2.37	1.93	1.49	5.22	7.94	.56	1.12
$2\frac{1}{2}$	2.87	2.31	1.75	7.28	14.32	.88	1.76
3	3.50	2.89	2.28	9.44	18.38	1.16	2.32
$3\frac{1}{2}$	4.00	3.36	2.72	12.92	22.63	1.40	2.80
4	4.50	3.82	3.14	13.44	24.88	1.70	3.40
$4\frac{1}{2}$	5.00						
5	5.56						
6	6.62						

Pipe away from the above standard will be charged at the price of Hydraulic Tubes.

The outside diameter of Extra and Double Extra Strong is always the same as ordinary pipe.

LAP-WELDED CHARCOAL IRON BOILER TUBES.

Outside Diameter, Inches.	Price Per Foot.	Thickness, Inches.	Thickness nearest Bgm. W. G.	Nominal Weight Per Foot.
1	.23	.072	15	.70
$1\frac{1}{4}$	.23	.072	15	.90
$1\frac{1}{2}$	.23	.083	14	1.24
$1\frac{3}{4}$	.22	.095	13	1.66
2	.22	.095	13	1.91
$2\frac{1}{4}$	.25	.095	13	2.16
$2\frac{1}{2}$	.28	.109	12	2.75
$2\frac{3}{4}$	.31	.109	12	3.04
3	.34	.109	12	3.33
$3\frac{1}{4}$	.38	.120	11	3.96
$3\frac{1}{2}$	.43	.120	11	4.28
$3\frac{3}{4}$	.45	.120	11	4.60
4	.52	.134	10	5.47
$4\frac{1}{2}$	.60	.134	10	6.17
5	.72	.148	9	7.58
6	1.00	.165	8	10.16

The above prices are for tubes up to 20 feet long—for tubes in excess of that length, ten per cent. will be added to net of invoice.

TUYERE PIPE.

1 inch Special Tuyere Pipe, 25 to 30 foot lengths.....per foot, 32c.

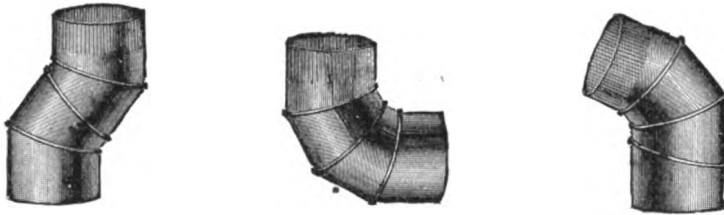
This Pipe is tested thoroughly. Every care is taken to have each piece perfect.

LIGHT GALVANIZED SPIRAL HOUSE LEADER, VENTILATING, AIR, AND BLOWER PIPE.



Inside Diameter, inches.....	2	3	4	5	6
Galvanized, per foot.....	\$0.14	.19	.25	.30	.38
Nominal Weight, pounds, per foot.....	$\frac{3}{8}$	$\frac{7}{8}$	1 $\frac{1}{4}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$

PATENT ADJUSTABLE ELBOWS.



Size, inches.....	2	3	4	5	6
Galvanized, price per dozen.....	\$2.40	3.60	4.80	6.60	8.40

TEE BRANCHES FOR SPIRAL PIPE.

Size.....	2	3	4	5	6
Price Galvanized, each.....	.70	.80	.90	1.00	1.30
" Reducing, each.....		\$1.00	1.10	1.20	1.50

Brass and Copper Tubing.

BRAZED TUBING.

Size, outside diameters.....	$\frac{1}{8}$	3-16	$\frac{1}{4}$	5-16	$\frac{3}{8}$ to 3 in.	Over 3 in.
Brazed Brass, per pound.....	\$1.50	1.00	.60	.45	.35	.45

Copper Tubing, 3c. per pound advance.

Discount.....per cent.

SEAMLESS TUBING.

Sizes, O. D.....	$\frac{1}{4}$	5-16	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$ to 4 in.
Gauge.....	18	17	17	17	16	16	14	13	12
Weight, per foot.....	.11	.17	.22	.29	.42	.51	.88	1.27	

Standard Lengths, 12 feet.

Price.....per pound.

Copper 3c. per pound advance over Brass.

IRON PIPE SIZE.

Size.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3 in.
Weight, per foot.....	$\frac{5}{8}$	4-5	1 $\frac{1}{4}$	1 $\frac{3}{4}$	2 $\frac{1}{2}$	2 $\frac{3}{4}$	3 $\frac{1}{2}$	4 $\frac{3}{4}$	8 $\frac{1}{3}$ lbs.

Price.....per pound.

Copper 3c. pound advance over Brass.

MALLEABLE IRON FITTINGS.

REVISED CLASSIFICATION AND PRICE LIST OF GAS, WATER AND STEAM FITTINGS.

Adopted by Manufacturers' Association, Jan'y 24, 1889.

CLASS A—

Elbows, $\frac{1}{8}$, $\frac{1}{4}$ x $\frac{1}{8}$, $\frac{3}{8}$ x $\frac{1}{8}$.
Tees, $\frac{1}{8}$, $\frac{1}{8}$ x $\frac{1}{4}$, $\frac{1}{4}$ x $\frac{1}{8}$, $\frac{3}{8}$ x $\frac{1}{8}$.

Price, 25 cts. per pound.

Reducing, Couplings, $\frac{1}{4}$ x $\frac{1}{8}$, $\frac{3}{8}$ x $\frac{1}{8}$.
Rod Couplings.

CLASS B—

Elbows and Tees, from $\frac{1}{4}$ to $\frac{1}{2}$ inclusive.
Street Elbows, $\frac{3}{4}$ and smaller.
Elbows and Tees, Side Outlets, all sizes.
Crosses, 1 in. and smaller.
Drop L's and Drop Tees, all sizes.
Caps and Lock nuts, 1 in. and smaller.
Reducing Couplings, $\frac{3}{8}$ x $\frac{1}{4}$ to 1 in. inclusive.

Price, 16 cts. per pound.

Extension Pieces.
Right and Left Couplings, $\frac{1}{4}$ to $\frac{3}{4}$ inclusive.
Right and Left Fittings, to 1 in. inclusive.
Right Hand Couplings, $\frac{1}{4}$ to $\frac{3}{4}$ inclusive.
Waste Nuts, Chandelier Hooks and Loops.
Return Bends, to 1 in. inclusive.
Wall Plates.

CLASS C—

Elbows and Tees, $\frac{3}{4}$ to 1 in. inclusive.
Street Elbows, 1 in. and larger.
Crosses, $1\frac{1}{4}$ in. and larger.
Caps and Lock-nuts, $1\frac{1}{4}$ in. and larger.
Reducing Couplings, $1\frac{1}{4}$ in. and larger.
Right and Left Fittings, $1\frac{1}{4}$ in. and larger.

Price, 13 cts. per pound.

Right and Left Couplings, 1 in. and larger.
Return Bends, $1\frac{1}{4}$ in. and larger.
Right Hand Couplings, 1 in. and $1\frac{1}{4}$ in.
Straps not tinned, all sizes.
Such Fittings with smaller holes than $\frac{3}{4}$ will be classed B.

CLASS D—

Elbows and Tees, $1\frac{1}{4}$ and larger. Such fittings, in this class, as have one or more outlets, smaller than 1 in., will be charged in Class C.
Hydrant Clamps, Street Washer Keys, Hydrant Handles and Rod Sockets.

Price, 10 cts. per pound.

45° Elbows, 1 in. and smaller, Price, 16 cents.

45° Elbows, $1\frac{1}{4}$ to 2 in. inclusive, Price, 13 cents.

Discount.....

Standard List of Galvanized Malleable Iron Fittings.

ELBOWS— $\frac{3}{8}$, $\frac{1}{2}$, $\frac{1}{2}$ x $\frac{3}{8}$, $\frac{3}{4}$, $\frac{3}{4}$ x $\frac{1}{2}$, 1, 1 x $\frac{3}{4}$, $1\frac{1}{4}$, $1\frac{1}{4}$ x 1, $1\frac{1}{2}$, $1\frac{1}{2}$ x $1\frac{1}{4}$, 2, 2 x $1\frac{1}{2}$, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4.
STREET ELLS— $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2.
45° ELBOWS— $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2.

TEES.

Size.	Size.	Size.	Size.
$\frac{3}{8}$ x $\frac{3}{8}$ x $\frac{3}{8}$	1 x $\frac{3}{4}$ x 1	$1\frac{1}{4}$ x $1\frac{1}{4}$ x $\frac{1}{2}$	2 x 2 x $\frac{3}{4}$
$\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{3}{8}$	1 x 1 x $\frac{1}{2}$	$1\frac{1}{2}$ x $1\frac{1}{4}$ x $1\frac{1}{4}$	2 x 2 x 1
$\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{1}{2}$	1 x 1 x $\frac{3}{4}$	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $1\frac{1}{2}$	2 x 2 x $1\frac{1}{4}$
$\frac{1}{2}$ x $\frac{1}{2}$ x $\frac{3}{4}$	1 x 1 x 1	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $\frac{1}{2}$	2 x 2 x $1\frac{1}{2}$
$\frac{3}{4}$ x $\frac{1}{2}$ x $\frac{1}{2}$	1 x 1 x $1\frac{1}{4}$	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $\frac{3}{4}$	2 x $1\frac{1}{2}$ x 2
$\frac{3}{4}$ x $\frac{1}{2}$ x $\frac{3}{4}$	$1\frac{1}{4}$ x 1 x 1	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 1	2 x 2 x 2
$\frac{3}{4}$ x $\frac{3}{4}$ x $\frac{3}{8}$	$1\frac{1}{4}$ x 1 x $1\frac{1}{4}$	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $1\frac{1}{4}$	$2\frac{1}{2}$ x $2\frac{1}{2}$ x $2\frac{1}{2}$
$\frac{3}{4}$ x $\frac{3}{4}$ x $\frac{1}{2}$	$1\frac{1}{4}$ x $1\frac{1}{4}$ x $\frac{3}{4}$	$1\frac{1}{2}$ x $1\frac{1}{2}$ x $1\frac{1}{2}$	3 x 3 x 3
$\frac{3}{4}$ x $\frac{3}{4}$ x $\frac{3}{4}$	$1\frac{1}{4}$ x $1\frac{1}{4}$ x 1	$1\frac{1}{2}$ x $1\frac{1}{2}$ x 2	$3\frac{1}{2}$ x $3\frac{1}{2}$ x $3\frac{1}{2}$
$\frac{3}{4}$ x $\frac{3}{4}$ x 1	$1\frac{1}{4}$ x $1\frac{1}{4}$ x $1\frac{1}{4}$	2 x $1\frac{1}{2}$ x $1\frac{1}{2}$	4 x 4 x 4
1 x $\frac{3}{4}$ x $\frac{3}{4}$	$1\frac{1}{4}$ x $1\frac{1}{4}$ x $1\frac{1}{2}$	2 x 2 x $\frac{1}{2}$	

COUPLINGS—Right Hand— $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$ and 2.

COUPLINGS—Right and Left— $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$ and 2.

COUPLINGS—Reducing— $\frac{3}{4}$ x $\frac{1}{2}$, 1 x $\frac{3}{4}$, $1\frac{1}{4}$ x 1, $1\frac{1}{2}$ x $1\frac{1}{4}$, 2 x $1\frac{1}{2}$.

CROSSES—Straight Sizes— $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2.

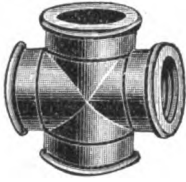
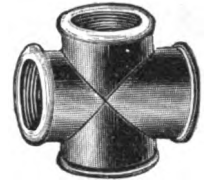
LOCKNUTS— $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$ and 2.

FEMALE DROP ELBOWS AND TEES— $\frac{1}{2}$, $\frac{3}{4}$.

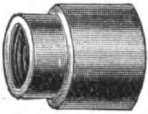
Galvanized Fittings, as per Standard List.

Price, per pound. **A** **B** **C** **D**
35 cents. 23 cents. 20 cents. 17 cents.

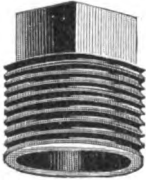
An extra charge of 10 cents per pound will be added to price of Galvanized Fittings, not enumerated in Standard List.

**CROSSES.**

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8
Cast Iron, each.....	.10	.12	.18	.28	.40	.50	.80	1.50	2.20	2.70	3.50	5.00	5.70	7.80	14.00	20.00	
Cast Iron, Reducing.....	.12	.14	.21	.32	.46	.58	.92	1.70	2.50	3.00	4.00	6.00	6.60	9.00	16.00	23.00	
Malleable Iron, each.....	.06	.08	.11	.20	.30	.42	.55	.85	2.00	3.10	4.00	5.75					
Gal. (above 2 in. C.I.).....	.15	.20	.32	.50	.80	1.00	1.60	3.00	4.25	5.50	7.00			10.50	16.00		

**REDUCERS.**

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	10	12
Price, Cast Iron, ea.....							.75	1.20	1.50	2.00	2.75	3.00	4.00	8.00	10.00	15.00	22.00	
Price, Malleable.....	.06	.09	.12	.18	.25	.36	.50											
Price, Galvanized.....	.08	.11	.16	.25	.35	.45	.60	.85	1.30	1.90	2.50							

**PLUGS.**

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	10	12
Price, each.....	.03	.03	.04	.05	.06	.10	.13	.20	.35	.50	.75	.85	1.35	1.75	2.40	3.75	5.50	7.50	10.00
Price, Galv'n'd, ea.....	.05	.05	.06	.08	.10	.15	.23	.35	.57	.95	1.35	1.60	2.35	3.45	4.65				

**CAPS.**

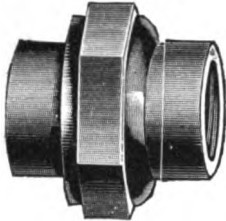
Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	10	12
Price, C. I., ea.....								.50	.80	1.10	1.30	1.60	2.00	2.35	4.00	4.35	7.25	10.00	
" Mal. I., ".....	.03	.03	.05	.08	.11	.15	.22	.30											
Price, Galvanized (above 2 in. C. I.).....	.05	.05	.07	.10	.14	.20	.30	.40	.65	1.00	1.30	1.60							

**BUSHINGS.**

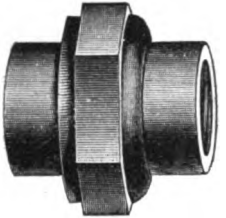
Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	10	12
Price, each.....	.05	.06	.07	.09	.13	.17	.27	.42	.60	.80	1.00	1.50	1.85	2.50	3.75	5.50	7.50	10.00
Price, Galv'n'd, ea.....	.06	.07	.10	.14	.21	.30	.44	.59										

**LOCK NUTS.**

Size, inches.....	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½	4	4½	5	6	7	8
Price, Cast Iron, ea..	.....	.....	.....	.....	.....	.....	.....	.40	.50	.70	.95	1.25	1.35	1.90	2.50	3.50	
Price, Malleable, ea..	.04	.04	.06	.07	.08	.10	.12	.25	.....	.....	.....	.....	.....	.....	.....	.....	.....

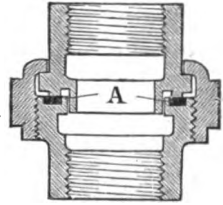
**UNIONS.**

Size, inches.....	¼	⅜	½	¾	1	1¼	1½	2	2½	3	3½
Price, Malleable each	.15	.18	.20	.28	.34	.46	.60	.80	1.50	2.10	3.00
Price, Galvanized, ea.	.20	.24	.27	.37	.50	.70	.90	1.20	2.25	2.90	4.50

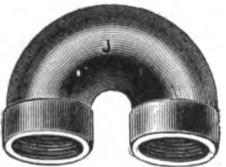
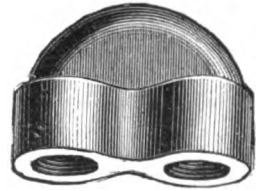
**THE "AMERICAN" UNION.**

With Non-Corrosive Metal Seat, forming an absolutely

Perfect Joint. No Washers Required.

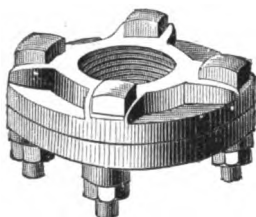


Size.....	¼	⅜	½	¾	1	1¼	1½	2	2½	3
Plain, each.....	.20	.24	.28	.35	.40	.56	.80	.95	2.00	2.75
Galvanized.....	.24	.28	.35	.46	.55	.78	1.12	1.35	2.90	3.75

**RETURN BENDS.**

Close Pattern.....	½	¾	1	1¼	1½	2	2½	3
Price, Cast Iron.....	.10	.15	.22	.34	.45	.75	1.50	2.25
“ “ “ Right and Left.....	.15	.17	.25	.40	.52	.86	1.75	2.60
Distance Centre to Centre, inches.....	.....	1½	1¾	2¼	.....	.....	.....	.....
Price, Malleable Iron.....	.10	.15	.22	.34	.45	.75	.....	.....
Distance Centre to Centre, inches.....	.....	1¼	1½	1¾	.....	.....	.....	.....
Right and Left.....	.....	.17	.25	.40	.52	.86	.....	.....
Open Pattern.....	.....	.....	.....	.....	.....	.....	.....	.....
Price, Cast Iron.....	.....	.20	.30	.48	.68	1.15	1.75	2.75
Distance Centre to Centre, inches.....	.....	2½	2½	3½	3¼	4	5	6½
Price, Malleable Iron.....	.20	.40	.50	.75	.90	1.60	2.60	.....
Distance Centre to Centre, inches.....	1½	2	2¼	2¾	3¼	4	4¾	.....

In ordering Return Bends for Coils, always state the length of Tubes to be used in the Coils, so that the spread will be allowed for.



FLANGE UNONS.

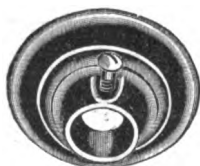
Including Bolts.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8	10	12
Price, Cast Iron, each.	.65	.70	.85	1.15	1.50	1.75	2.25	2.75	3.15	4.50	5.00	6.50	8.00	10.00	15.00	22.00



FLOOR PLATES.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each.....	.06	.08	.10	.15	.18	.23



CEILING PLATES.

For Wrought Iron Pipe.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each.....	.16	.18	.20	.25	.30



EXPANSION PIPE HANGERS.

Size, inches....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
Price, each.....	.22	.25	.30	.38	.44	.55	.65	.90	1.15

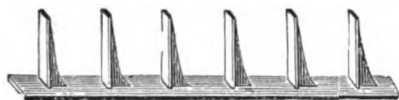
PATENT FLOOR AND CEILING PLATES.

Spun Brass, Nickel Plated.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each Floor Plate.....	.10	.11	.12	.13	.15
Price, each Ceiling Plate.....	.10	.11	.12	.13	.15

**HOOK PLATES.**

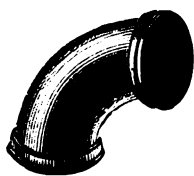
No. of Hooks.....	1	2	3	4	5	6
For $\frac{3}{4}$ inch Pipe, 2 in. between Centres, Price.	.07	.12	.16	.20	.24	.28
For 1 inch Pipe, $2\frac{1}{2}$ in. between Centres, "	.09	.15	.21	.27	.32	.40
For $1\frac{1}{4}$ inch Pipe, 3 in. between Centres, "	.10	.20	.30	.40	.50	.65
For $1\frac{1}{2}$ inch Pipe, $3\frac{1}{2}$ in. between Centres, "	.20	.40	.60	.80	1.00	1 20
For 2 inch Pipe, $4\frac{1}{2}$ in. between Centres, "	.30	.50	.75	1.00	1 25	1.50

**HOOK PLATES.—Expansion.**

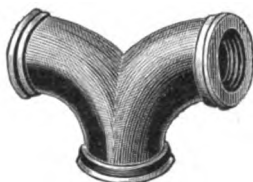
No. of Hooks.....	1	2	3	4	5	6
For $\frac{3}{4}$ inch Pipe, 2 in. between Centres, Price.	.10	.16	.24	.34	.40	.50
For 1 inch Pipe, $2\frac{1}{2}$ in. between Centres, "	.12	.20	.27	.38	.45	.55
For $1\frac{1}{4}$ inch Pipe, 3 in. between Centres, "	.15	.30	.33	.50	.65	.75

ELBOWS AND TEES.

FOR WATER CONNECTIONS.—CAST IRON.



No. 1.



No. 2.



No. 3.

Size, inches.....	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8
Price, each.....No. 1	.39	.70	1.05	1.80	2.45	4.00	5.25	6.70	8.20	12.00	19.00	26.00
Price, each.....Nos. 2 and 3	.60	1.05	1.58	2.70	3.70	6.00	7.90	10.50	12.30	18.00	23 60	39.00



Y Bend.

Steam Engineers have found that the Standard Fittings have been cut so short that they are utterly unsuitable for Water Fittings, and also for Steam, where the full pressure is required for Engine or Steam Pumps, etc.

The Radius (as will be seen) is very much increased over that of the ordinary fittings, thus reducing the friction to a minimum.

For Hydraulic and Steam Connections are invaluable.

CAST IRON.

Return Bend Back Outlet.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	7	8
Y Bend, each.....	.25	.30	.40	.60	.90	1.25	2.25	3.25	4.50	6.00	9.00	12 00	17.00	25.00
Return Bend Back Outlet, ea.		.30	.40	.60	.90	1.25								



Branch Tee for Box Coll.



Branch Tees for Circulation.

BRANCH TEES—Cast Iron.

For Box and Circulation Coils.

Number of Branches,		2	3	4	5	6	7	8	9	10	11	12	14	16
For $\frac{3}{4}$ in. Pipe, 2 in. Centre to Centre, Large Pattern,	$\frac{3}{4}$ in. inlet,	.65	.75	.95	1.15	1.35	1.55	1.75	1.95	2.25	2.60	3.10		
	1 " "	.90	1.00	1.20	1.40	1.60	1.80	2.00	2.20	2.50	2.85	3.35		
	1 $\frac{1}{4}$ " "	1.05	1.15	1.35	1.55	1.75	1.95	2.15	2.35	2.65	3.00	3.50		
For 1 in. Pipe, 2 $\frac{1}{2}$ in. Centre to Centre Large Pattern,	1 " "	.90	1.00	1.20	1.40	1.70	2.15	2.40	2.80	3.30	4.20	4.75	6.25	7.75
	1 $\frac{1}{4}$ " "	1.15	1.25	1.45	1.65	1.95	2.40	2.65	3.05	3.55	4.45	5.00	6.50	8.00
	1 $\frac{1}{2}$ " "	1.30	1.40	1.60	1.80	2.10	2.55	2.80	3.20	3.70	4.60	5.15	6.65	8.15
	2 " "	1.55	1.65	1.85	2.05	2.35	2.80	3.05	3.45	3.95	4.85	5.40	6.90	8.40
For 1 in. Pipe, 2 $\frac{1}{2}$ in. Centre to Centre Small Pattern,	1 " "	.85	.95	1.00	1.10	1.30	1.55	1.80	2.05					
	1 $\frac{1}{4}$ " "	1.10	1.20	1.25	1.35	1.55	1.80	2.05	2.30					

BRANCH TEES—Cast Iron.

For Circulation Coils.

Number of Branches,		2	3	4	5	6	7	8	9	10
For 1 $\frac{1}{4}$ in. Pipe, 3 ins. Centre to Centre, Large Pattern,	1 $\frac{1}{4}$ in. inlet	1.25	1.55	1.90	2.30	2.80	3.30	3.80	4.40	5.00
	1 $\frac{1}{2}$ " "	1.50	1.80	2.15	2.55	3.05	3.55	4.05	4.60	5.25
	2 " "	1.65	1.95	2.45	2.90	3.40	3.90	4.40	4.80	5.50
	2 $\frac{1}{2}$ " "	1.90	2.20	2.55	2.95	3.45	3.95	4.45	5.00	5.65
For 1 $\frac{1}{2}$ in. Pipe, 3 $\frac{1}{2}$ ins. Centre to Centre Large Pattern,	1 $\frac{1}{4}$ " "	2.30	3.00	3.75	4.50	5.30	6.20	6.80	7.85	9.10
	2 " "	2.55	3.25	4.00	4.75	5.55	6.45	7.05	8.10	9.35
	2 $\frac{1}{2}$ " "	2.70	3.40	4.15	4.90	5.70	6.60	7.20	8.25	9.50
	3 " "	3.05	3.75	4.50	5.25	6.05	6.95	7.55	8.60	9.85
For 2 in. Pipe, 4 $\frac{1}{2}$ ins. Centre to Centre Large Pattern,	2 " "	3.10	4.20	5.30	6.40	7.55	9.10	10.10	11.10	12.35
	2 $\frac{1}{2}$ " "	3.35	4.45	5.55	6.65	7.80	9.35	10.35	11.35	12.60
	3 " "	3.50	4.60	5.70	6.80	7.95	9.50	10.50	11.50	12.75
	3 $\frac{1}{2}$ " "	3.85	4.95	6.05	7.15	8.30	9.85	10.85	11.85	13.10

Branch Tees not specified above will be made to order at an advance of 25 per cent.

Small Pattern for Circulation have inlet and outlet on ends.

Large Pattern for Circulation have inlet and outlet on ends.

Small Pattern for Box Coils are tapped left hand and have a back outlet only.

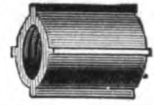
Large Pattern for Box Coils are tapped left hand and have a back outlet only.

When Branch Tees are ordered left hand we take it for granted they are for Box Coils, and will so fill the order. If left hand are wanted for Circulation, the order must distinctly state that fact.

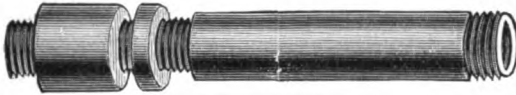
In all cases please state for what purpose the Branch Tees are required, Box Coils or Circulation.



WROUGHT IRON, AND RIGHT AND LEFT COUPLINGS.



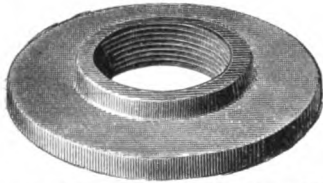
Size, inches....	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8	10	12
Price, Plain, ea	.05	.05	.06	.07	.10	.13	.17	.21	.28	.40	.60	.80	1.00	1.50	1.65	2.40	3.25	4.25	7.50	10.00
" Galv'd, "	.06	.06	.08	.10	.13	.18	.25	.32	.40	.55	.80	1.05	1.40	2.00	2.75	3.75	.....	.....	.....	.....
" R.&L.Mal. "	.....	.04	.06	.09	.12	.18	.25	.36	.44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
" R.&L.Gal. "	.....	.08	.10	.13	.20	.25	.35	.42	.65	1.00	1.50	.....	.....	.....	.....	.....	.....	.....	.....	.....



LONG SCREWS.

With Coupling and Lock-Nut Faced.

Size, inches.....	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Standard Length, inches.....	2 1/2	3	3 1/2	4 1/2	5	5 1/8	6	6 1/2	7	8
Price, Standard Length, each..	.30	.35	.40	.55	.75	1.00	1.30	1.70	2.70	3.70

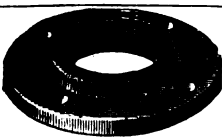


CAST IRON FLANGES.

Size of Pipe, inches.....	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	6	7	8	10
Diam. Flange—																
3 inches.....	.17	.18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3 1/2 ".....	.20	.21	.22	.25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4 ".....	.26	.28	.28	.30	.31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4 1/2 ".....	.31	.33	.33	.35	.36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5 ".....	.40	.40	.42	.42	.45	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5 1/2 ".....	.50	.50	.52	.52	.55	.55	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6 ".....	.55	.60	.62	.62	.65	.65	.65	.....	.....	.....	.....	.....	.....	.....	.....	.....
6 1/2 ".....	.68	.72	.72	.72	.75	.75	.75	.75	.....	.....	.....	.....	.....	.....	.....	.....
7 ".....	.80	.80	.80	.80	.80	.80	.84	.87	.....	.....	.....	.....	.....	.....	.....	.....
7 1/2 ".....	.90	.90	.90	.90	.90	.90	.96	1.00	1.04	.....	.....	.....	.....	.....	.....	.....
8 ".....	1.00	1.00	1.00	1.00	1.00	1.00	1.08	1.13	1.22	.....	.....	.....	.....	.....	.....	.....
8 1/2 ".....	.....	.....	1.10	1.10	1.15	1.15	1.22	1.26	1.40	1.55	1.65	.....	.....	.....	.....	.....
9 ".....	.....	.....	.....	1.20	1.25	1.30	1.37	1.55	1.58	1.70	1.80	2.20	.....	.....	.....	.....
9 1/2 ".....	.....	.....	.....	.....	1.45	1.45	1.52	1.75	1.76	1.90	2.00	2.40	.....	.....	.....	.....
10 ".....	.....	.....	.....	.....	1.65	1.65	1.69	1.85	1.96	2.10	2.20	2.60	.....	.....	.....	.....
10 1/2 ".....	.....	.....	.....	.....	1.90	1.90	1.90	1.95	2.16	2.32	2.40	2.80	.....	.....	.....	.....
11 ".....	.....	.....	.....	.....	2.00	2.12	2.25	2.36	2.54	2.60	3.00	.....	.....	.....	.....	.....
11 1/2 ".....	.....	.....	.....	.....	2.25	2.35	2.50	2.56	2.76	2.80	3.20	3.75	4.00	.....	.....	.....
12 ".....	.....	.....	.....	.....	.....	2.60	2.85	2.85	3.00	3.05	3.45	4.10	4.50	.....	.....	.....
13 ".....	.....	.....	.....	.....	.....	.....	.....	3.50	3.75	3.75	3.75	4.50	5.00	6.00	.....	.....
14 ".....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.25	5.00	5.60	6.60	.....
15 ".....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.00	5.50	6.25	7.25	.....
16 ".....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.25	6.90	8.00	.....
17 ".....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Circle Flanges made to order at double above prices.

FLOOR FLANGES.



Size of Pipe, inches.....	1/2	3/4	1	1 1/4	1 1/2	2
Diam. of Flange—						
3 1/2 inches.....	.17	.....	.....	.....	.....	.....
4 ".....	.....	.21	.22	.....	.....	.....
5 ".....	.....	.....	.35	.36	.....	.....
6 ".....	.....	.....	.....	.....	.....	.55



NIPPLES.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$
Price, Close or Short.....	.05	.05	.06	.07	.09	.10	.14	.17	.25	.56
" Long.....	.07	.07	.09	.10	.11	.15	.20	.25	.35	.75
" 5 in. Long.....	.16	.16	.17	.18	.20	.22	.29	.36	.44	.....
" 6 ".....	.17	.17	.18	.19	.21	.24	.31	.38	.49	.80
" 7 ".....	.18	.18	.19	.20	.22	.27	.33	.40	.54	.85
" 8 ".....	.19	.19	.20	.21	.23	.29	.35	.42	.59	.91
" 9 ".....	.20	.20	.21	.22	.25	.31	.38	.45	.64	1.00
" 10 ".....	.21	.21	.22	.23	.27	.33	.40	.48	.69	1.10
" 11 ".....	.22	.22	.23	.25	.29	.36	.43	.51	.74	1.20
" 12 ".....	.23	.23	.25	.27	.31	.40	.46	.55	.79	1.30
" Close or Short, Galvan'd.....	.....	.07	.08	.09	.11	.13	.17	.23	.32	.65
" Long, Galvanized.....	.....	.09	.11	.13	.16	.19	.24	.31	.40	.85

Size, inches.....	3	3 $\frac{1}{2}$	4	4 $\frac{1}{2}$	5	6	7	8	9	10
Price, Close or Short.....	.75	1.00	1.25	1.75	2.00	2.75	4.00	5.75	.....	.....
" Long.....	.95	1.25	1.60	2.25	2.60	3.60	.....	.....	.....	.....
" 5 in. Long.....	.....	.....	.....	.....	.....	.....	3.90	4.95	6.40	7.90
" 6 ".....	.97	.....	.....	.....	.....	.....	4.30	5.40	7.00	8.65
" 7 ".....	1.06	1.38	1.75	2.20	2.70	3.30	4.70	6.60	7.80	9.60
" 8 ".....	1.15	1.50	1.92	2.45	2.95	3.90	5.10	6.90	8.20	10.20
" 9 ".....	1.24	1.62	2.10	2.56	3.20	4.15	5.50	6.75	8.80	11.00
" 10 ".....	1.34	1.74	2.30	2.75	3.45	4.20	5.90	7.50	9.40	11.80
" 11 ".....	1.44	1.86	2.50	2.94	3.80	4.65	6.30	7.80	10.00	12.60
" 12 ".....	1.55	2.00	2.70	3.15	4.20	4.90	.....	.....	.....	.....
" Close or Short, Galvan'd.....	1.00	1.25	1.40	1.90	2.40	3.50	.....	.....	.....	.....
" Long, Galvanized.....	1.20	1.50	1.90	2.40	3.00	4.40	.....	.....	.....	.....

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2	2 $\frac{1}{2}$	3
R. and L., Short.....	.10	.10	.12	.15	.18	.24	.30	.40	1.00	1.25
R. and L., Long.....	.12	.14	.16	.20	.24	.35	.46	.60	1.30	1.60

BRASS FITTINGS.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2
Elbows.....	.10	.12	.16	.25	.35	.50	.85	1.15	1.50
Tees.....	.12	.15	.20	.30	.45	.70	1.00	1.25	1.75
Crosses.....	.....	.25	.30	.40	.55	.80	1.15	1.40	1.95
Plugs.....	.06	.08	.10	.15	.20	.25	.40	.50	.90
Caps.....	.08	.10	.15	.20	.30	.40	.60	.75	1.25
Lock-Nuts.....	.....	.08	.10	.15	.20	.25	.40	.50	.90
Reducers.....	.....	.....	.25	.30	.45	.60	.80	1.00	1.25
Couplings.....	.08	.10	.15	.20	.30	.40	.60	.75	1.25
Bushings to reduce one size.....	.....	.07	.09	.13	.21	.38	.55	.67	.84
Bushings to reduce more than one size.....	.....	.....	.09	.13	.21	.38	.50	.67	.84
Return Bends, close pattern.....	.....	.....	.....	.40	.70	.90	1.25	2.00	2.75
Return Bends, open pattern.....	.....	.....	.....	.50	.80	1.00	1.50	2.25	3.00
Unions.....	.35	.40	.55	.75	1.00	1.40	1.90	2.75	4.00
Nipples.....	.15	.20	.30	.35	.45	.60	.90	1.25	1.60

GAS FITTERS' HOOKS.

Size of Pipe.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2
Hooks, per 100, net.....	.70	.75	.80	1.00	1.20	1.50	2.00	2.50

MALLEABLE STRAPS.

Price per pound, Plain.....15c. | Price per pound, Galvanized.....20c.
 Price per pound, Tinned.....25c.

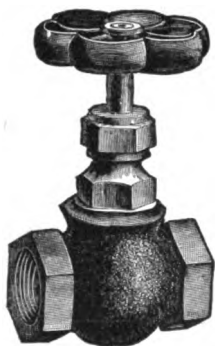


Fig. 1.

Steam Brass Work.

GLOBE AND ANGLE VALVES.

Brass.

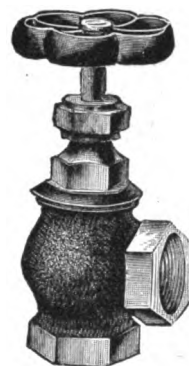


Fig. 2.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, each .....	.60	.60	.75	1.00	1.35	1.80	2.80	3.90	5.90	11.25	16.00

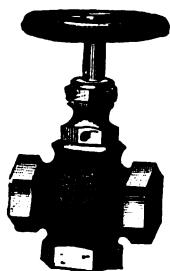


Fig. 3.

CROSS VALVES.

Brass.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, each.....	.85	1.00	1.50	2.00	2.50	3.50	5.00	8.00	16.00	24.00



Fig. 4.

CHECK VALVES.—Brass.

Horizontal, Angle and Vertical.



Fig. 5.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, each .....	.50	.50	.60	.85	1.15	1.55	2.30	3.25	5.20	10.00	14.00

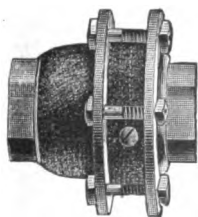


Fig. 6.

STRAIGHTWAY CHECK VALVES.

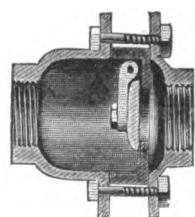


Fig. 7—Sectional View

Size.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	6	7	8
Screwed Ends.....	1.50	1.90	3.00	4.00	5.75	10.00	12.50	16.00	18.00	25.50	29.00	35.00	51.00	64.00
Flanged Ends.....						11.00	14.00	18.00	20.00	28.00	32.00	38.00	54.00	68.00
Extra Valves and Seats	1.00	1.25	1.90	2.40	3.50	4.20	6.00	8.00	10.00	12.00	15.00	17.00	23.00	30.00
Extra for Leath'r Disks	.20	.20	.20	.20	.30	.40	.50	.60	.80	1.00	1.20	1.50	1.80	2.10

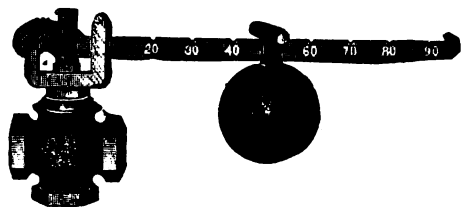


Fig. 8.

SAFETY VALVES.

Brass.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each.....	2.00	2.25	2.75	3.50	5.00	7.00	8.50	12.00



Fig. 9.

LOW PRESSURE SAFETY VALVES.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each.....	1.50	2.25	3.00	4.00	5.50	.....



Fig. 10.

HOSE AND GARDEN VALVES.

Brass.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$
Price, each, Fig. 10.....	1.25	1.65	2.20	4.00	5.50	7.00	10.00



Fig. 11.

EXPANSION JOINTS.

Brass.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Traverse, inches.....	2	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{3}{4}$
Price, each.....	1.50	2.00	2.75	4.00	5.50	8.00	16.00	24.00

IRON BODY BRASS SLEEVES.

Size, inches.....	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	7	8	9	10	12
Traverse, inches.....	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	5	5	6	7	7	7	8
Price, each, Scd.....	5.75	8.50	11.50	15.00	34.00	40.00	70.00	90.00	105.00	150.00	.....
Price, each, Flanged.....	.....	.....	.....	.....	.....	.....	.....	105.00	120.00	170.00	240.00

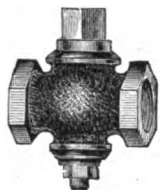


Fig. 12.

STEAM COCKS.—Brass.**Flat or Square Heads.**

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, each.....	.70	.70	.75	1.10	1.50	2.25	3.75	4.80	7.25	14.00	20.00
Check and Waste, each.....				1.20	1.65	2.45	4.00	5.10	7.65	14.50	20.75
Male and Female, each.....		.80	.85	1.20	1.70	2.55	4.15	5.40	8.00	.....	.....



Fig. 13.

STEAM COCK WRENCHES.**Malleable Iron.**

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Number.....	3	4	5	6	7	8	9	10
Price, each, net.....	.07	.09	.14	.19	.25	.44	.56	1.00

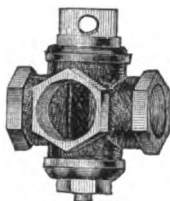


Fig. 14.

THREE WAY COCKS.**Brass.**

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, each.....	1.65	2.25	3.40	5.50	7.00	10.00	18.00	26.00

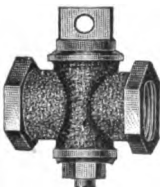


Fig. 15.

GAS SERVICE COCKS.**Brass.**

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, each.....	.55	.55	.65	.75	1.00	1.40	2.20	3.00	5.00	10.00	15.00
Price, Heavy, with Stop, ea.....				1.05	1.55	2.20	3.25	4.50	7.40	.....	.....
Price, Male and Female, ea.....				.85	1.20	1.70	2.60	3.60	5.75	11.50	17.00



Fig. 16.

GAS METER COCKS.**Brass.**

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each.....	.60	.70	.85	1.20	1.70	2.60	3.60	5.75

BRASS GAS FIXTURE FITTINGS.

TWO-LIGHT PENDANT COCK.



Fig. 17.

BRACKET COCK.

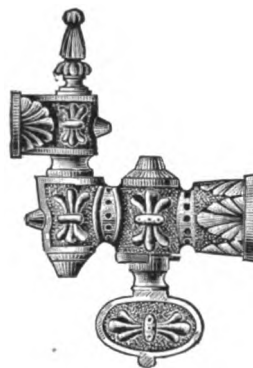


Fig 18.

Size, Fig. 17.....	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{8}$
Per dozen.....	9.70	9.70	8.00
Size, Fig. 18.....	$\frac{3}{8} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$
Per dozen.....	9.50	8.00	7.50

UNIVERSAL BRACKET COCKS.

(NOT ILLUSTRATED.)

Size.....	$\frac{3}{8} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$
Per dozen.....	13.50	12.00	12.00

ELBOW BURNER COCK.

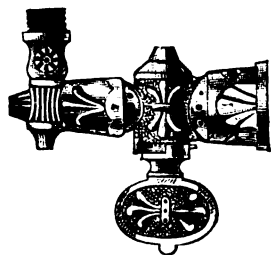


Fig. 19.

ELBOW PENDANT COCK.

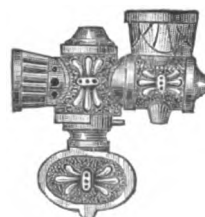


Fig. 20.

Size, Fig. 19.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{8}$
Per dozen.....	7.00	6.00	5.25	4.50
Size, Fig. 20.....	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{1}{8}$
Per dozen.....	5.40	5.40	5.30	4.40

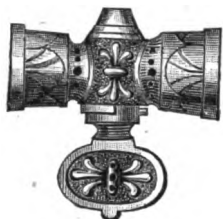
STRAIGHT COCK.

Fig. 21.

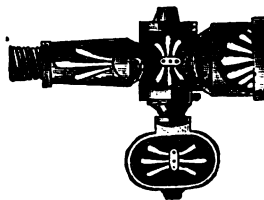
PILLAR COCKS.

Fig. 22.

Size, Fig. 21.....	$\frac{3}{8} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{3}{8}$	$\frac{1}{8} \times \frac{1}{8}$
Per dozen.....	5.40	5.00	4.50	4.40	3.50
Size, Fig. 22.....	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{8}$
Per dozen.....	7.50	6.50	5.25	4.00	3.25

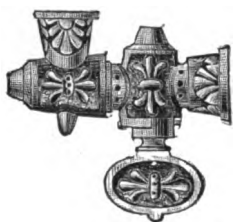
REVOLVING COCK.

Fig. 23.

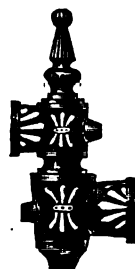
TOP SWING.

Fig. 24.

Size, Fig. 23..	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{3}{8}$
Per dozen....	8.00	8.00	7.00	7.00
Size, Fig. 24.....	$\frac{3}{8} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$	
Per dozen.....	6.00	5.00	5.00	

UNIVERSAL REVOLVING COCKS.

(NOT ILLUSTRATED.)

Size.....	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$	$\frac{1}{4} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{3}{8}$
Per dozen.....	9.40	9.40	10.20	10.20

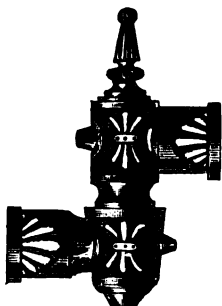
MIDDLE SWING.

Fig. 25.

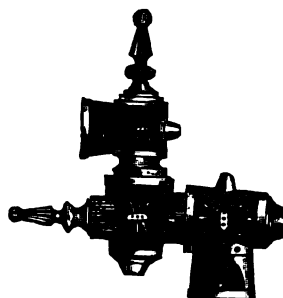
UNIVERSAL SWING.

Fig. 26.

Size, Fig. 25.....	$\frac{1}{4} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{3}{8}$	$\frac{1}{8} \times \frac{1}{8}$	
Per dozen.....	4.25	4.25	3.75	
Size, Fig. 26.....	$\frac{3}{8} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{1}{4}$	$\frac{1}{4} \times \frac{1}{4}$	$\frac{1}{8} \times \frac{1}{8}$
Per dozen.....	8.60	7.90	7.40	7.40

SIDE NOZZLE.

Fig. 27.

STRAIGHT NOZZLE.

Fig. 28.

Size, Fig. 27.....	$\frac{1}{4}$	$\frac{1}{8}$
Per dozen.....	1.70	1.00
Size, Fig. 28.....	$\frac{1}{4}$	$\frac{1}{8}$
Per dozen.....	1.70	1.00

STIFF JOINT.

Fig. 29.

CONNECTING BALL.

Fig. 30.

Size, Fig. 29.....	$\frac{1}{2} \times \frac{1}{2}$	$\frac{1}{2} \times \frac{3}{8}$	$\frac{1}{2} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{3}{8}$	$\frac{3}{8} \times \frac{1}{4}$	$\frac{3}{8} \times \frac{1}{8}$
Per dozen.....	2.90	2.00	2.00	1.70	1.50	1.40
Size, Fig. 30.....						$\frac{3}{8} \times \frac{3}{8}$
Per dozen.....						1.70

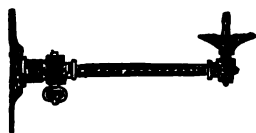
STAPLE GAS BRACKETS.

Fig. 31.

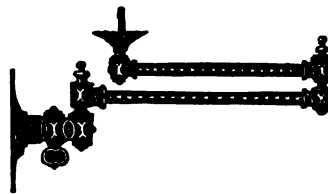


Fig. 32.

Stiff.....	each,	.70
Single Swing.....	"	.90
Double ".....	"	1.20
Three ".....	"	1.60
Universal Swing.....	"	1.60

BRASS PILLARS AND TIPS.

Lava Tips.....	per gross,	1.80
Scotch Tips.....	"	2.50
Brass Burners.....	per doz.,	.50
Empire ".....	"	1.00
Eureka " Self Lighting.....	"	10.00
Brass Pillars.....	"	.15

Genuine "Jenkins' Bros." Valves.

If on trial these goods are found not to be all that is claimed, they may be returned and money will be refunded.

The Genuine Jenkins' Bros. Valves are LARGER, HEAVIER, and BETTER proportioned than any of the numerous imitations now in

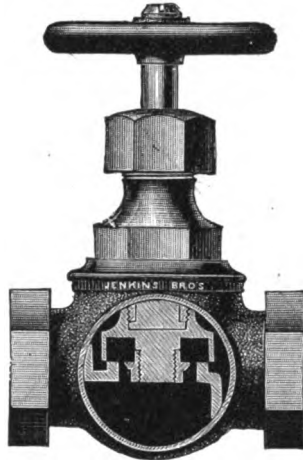


Fig. 32.

the market. The advantages of the Removable Disc are too well known to require comment.

PRICE LIST OF THE JENKINS' BROS. GLOBE AND ANGLE VALVES.

Size.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Globe and Angle Valves, Brass.....	1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.00	15.75	22.00
" " " " " Flang'd					6.00	9.00	11.00	16.50	25.00	34.00

IRON BODY.—Composition Mounted.

Size.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Globe and Angle Valves—Brass Hub, Screwed.....	2.75	2.85	3.85	5.00	7.25	11.00	16.00
" " " " " Flanged.....					8.50	13.00	18.00

Size.....	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	8	10	12
Globe & Angle Valves with Yoke Screw'd	10.00	12.00	16.75	19.50	24.00	40.00	48.00	90.00	130.00	185.00
" " " " " Flang'd	11.75	14.00	18.50	21.50	26.00	42.00	50.00	90.00	130.00	185.00

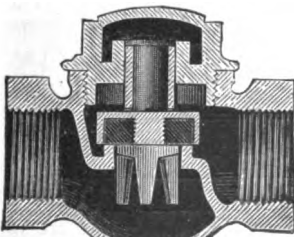


Fig. 33.

JENKINS' PATENT CHECK VALVES.

Size.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Brass.....	1.10	1.20	1.30	1.90	2.60	3.60	5.00	7.50	13.50	20.50

IRON BODY.

Size.....	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6
I. B. Check, Screwed.....	10.50	14.00	17.00	20.00	30.00	40.00
I. B. Check, Flanged.....	12.50	16.50	20.00	23.00	33.00	43.00

GATE VALVES.

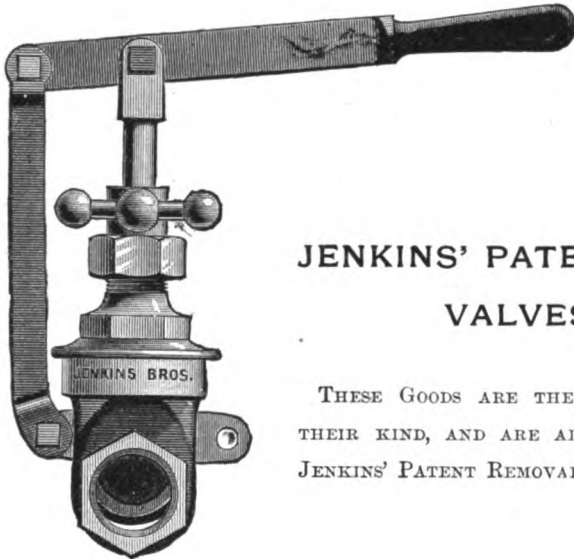


Fig. 34.

JENKINS' PATENT GATE VALVES.

THESE GOODS ARE THE VERY BEST OF THEIR KIND, AND ARE ALL FITTED WITH JENKINS' PATENT REMOVABLE DISC.

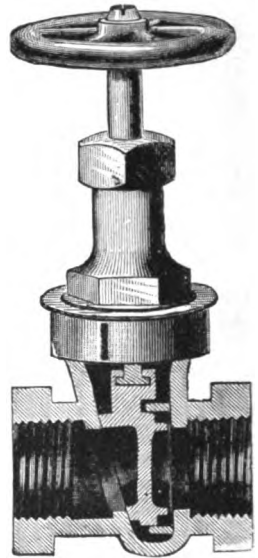


Fig. 35.

PRICE LIST OF THE JENKINS PATENT GATE VALVES.

Size.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Gate Valves, Brass.....	1.50	2.00	2.85	4.00	5.00	7.50	14.00	20.00
" " " Flanged.....	3.00	4.00	5.00	7.00	9.50	13.50	21.00	28.00

IRON BODY.—Composition Mounted.

Size.....	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	8	10	12
Gate Valves, Screwed.....	8.00	12.00	15.00	18.00	21.00	30.00	36.00	62.00	85.00	120.00
" " " Flanged.....	9.00	13.00	16.00	19.00	22.50	32.00	38.00	62.00	85.00	120.00
Hub, or Spigot-Gate Valves...	9.00	12.00	15.00	18.00	21.00	30.00	36.00	62.00	85.00	120.00

JENKINS' PATENT SLIDING STEM AND LEVER GATE VALVES.

Size.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Sliding Stem and Lever Gate Valves, Brass...	2.50	3.20	4.25	5.60	6.80	9.50	16.25	22.50

IRON BODY.—Composition Mounted.

Size.....	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	7	8
Sliding Stem and Lever Gate Valves, Screwed	10.00	14.25	17.50	20.75	24.00	33.25	39.50	53.75	66.00
" " " " " Flanged	11.00	15.25	18.50	21.75	25.50	35.25	41.50	53.75	66.00

JENKINS' DISCS FOR VALVES.

Size.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	7	8	10	12
Price.....	4	5	6	7	8	12	16	24	32	40	50	60	80	1.00	1.20	1.40	1.75	2.00

RADIATOR VALVES.

WITH PATENT WOOD WHEELS.



Fig. 36.

Size, inches.....	½	¾	1	1¼	1½	2
Price, Brass, each.....	1.35	1.60	2.25	3.25	4.50	7.00
Price, Nickel Plated, each.....	1.65	1.95	2.65	3.70	5.00	7.75
Price, Nickel Plated Trimmings, Rough Body.....	1.55	1.85	2.50	3.50	4.80	7.50
Price, Nickel Plated, with Jenkins' Seat, each.....	2.50	2.85	3.65	4.90	6.75	11.00
Price, Nickel Plated Trimmings, with Jenkins' Seat, Rough Body.....	2.25	2.70	3.50	4.75	6.50	10.75

Tapped Left hand on bottom and Right hand on side.

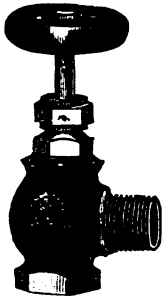


Fig. 37.

Size, inches.....	½	¾	1	1¼	1½	2
Price, Brass, each.....	1.45	1.70	2.35	3.35	4.60	7.15
Price, Nickel Plated, each.....	1.75	2.05	2.75	3.80	5.10	7.90
Price, Nickel Plated Trimmings, Rough Body.....	1.65	1.95	2.60	3.60	4.90	7.65
Price, Rough Nickel Plated, with Jenkins' Seat.....	2.60	2.95	3.75	5.00	6.85	11.15
Price, Rough Nickel Plated Trim- mings, with Jenkins' Seat.....	2.35	2.80	3.60	4.85	6.60	10.90

Tapped Left hand on bottom and Right hand on side.

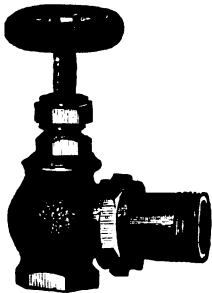


Fig. 38.

WITH MALE UNION.

Size, inches.....	½	¾	1	1¼	1½	2
Price, Brass, each.....	2.05	2.45	3.25	4.50	6.50	10.00
Price, Nickel Plated, each.....	2.40	2.85	3.65	5.05	7.10	10.85
Price, Nickel Plated Trimmings, Rough Body.....	2.30	2.75	3.50	4.85	6.90	10.50
Price, Nickel Plated, with Jenkins' Seat, each.....	3.20	3.80	4.75	6.40	8.10	13.10
Price, Nickel Plated Trimmings, with Jenkins' Seat, each.....	3.00	3.75	4.65	6.25	8.00	12.85

Tapped both ends Right hand.

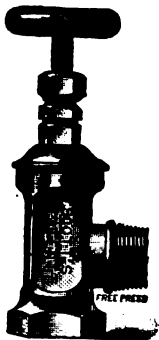


Fig. 39.

PATENT STRAIGHTWAY RADIATOR VALVE.

Size, inches.....	½	¾	1	1¼	1½
Price, Brass.....	1.65	2.00	2.65	3.70	4.80
Price, Nickel Plated.....	1.80	2.25	2.90	4.00	5.20

Furnished with Union on side opening at a slight additional cost.

ALL RADIATOR VALVES FURNISHED NICKEL PLATED TRIMMINGS, UNLESS OTHERWISE ORDERED.

COMPRESSION AIR VALVES.

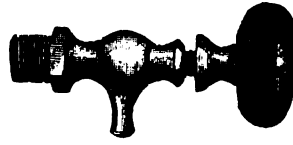


Fig. 40.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
Finished, each.....	.65	.70	.75
Nickel Plated, each.....	.70	.75	.80



Fig. 41.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$
Finished, each.....	.35	.40
Nickel Plated, each.....	.40	.45

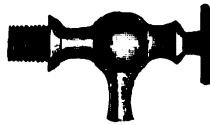


Fig. 42.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
Finished, each.....	.50	.55	.60
Nickel Plated, each.....	.55	.60	.65

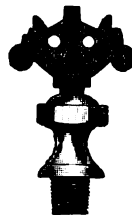


Fig. 43.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$
Finished, each.....	.30	.35
Nickel Plated, each.....	.35	.40

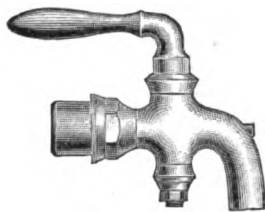
STEAM BIBBS.

Fig. 44.

Diameter of Opening, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Diameter of Blank Shanks, inches.....	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{8}$	$1\frac{3}{8}$	$1\frac{7}{8}$	2	$2\frac{3}{8}$	$2\frac{7}{8}$	$3\frac{7}{8}$
Price, Rough, each.....	1.00	1.25	1.50	1.75	2.50	3.50	5.00	8.00	15.00	25.00	35.00
Price, Finished, each..	1.25	1.50	2.00	2.25	3.00	4.50	6.00	10.00	18.00	30.00	40.00

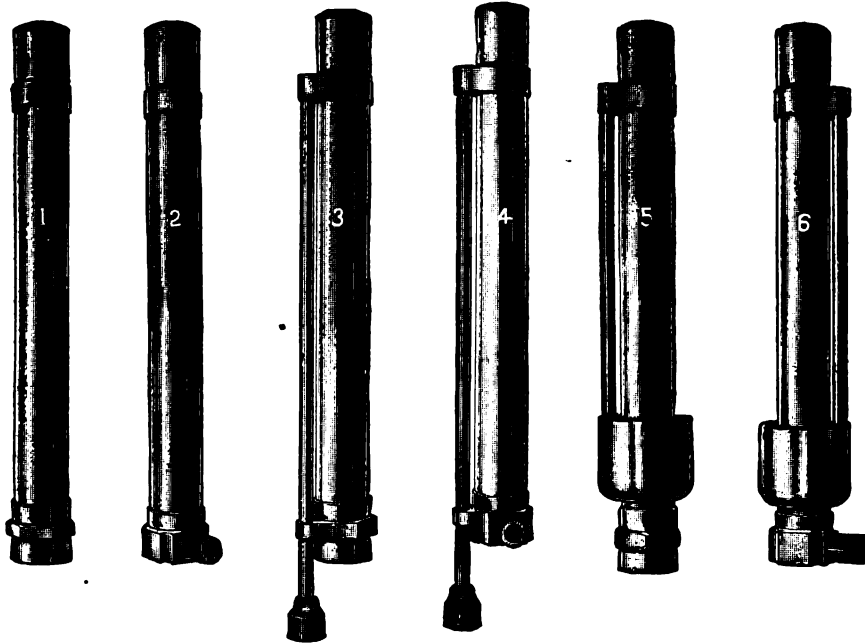
DAVIS PATENT AUTOMATIC AIR VALVES.

Fig. 45.

Fig. 46.

Fig. 47.

Fig. 48.

Fig. 49.

Fig. 50.

Figure.....	45	46	47	48	49	50
Brass, per dozen.....	13.50	13.50	15.00	15.00	17.00	17.00
Nickel Plated, per dozen.....	15.00	15.00	17.00	17.00	19.00	19.00

IRON BODY STEAM WORK.

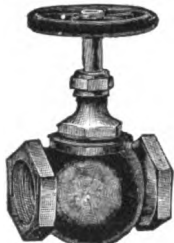


Fig. 51.

IRON GLOBE AND ANGLE VALVES.

Brass Mounted.



Fig. 52.

Size, inches.....	2	2½	3
Price, Screwed End, each.....	5.00	7.50	10.50
Price, Flange End, each.....	6.75	9.50	13.50
Diameter of Flange, inches.....	6¾	6¾	8



Fig. 53.

IRON GLOBE AND ANGLE VALVES.

With Yoke.



Fig. 54.

Size, inches.....	2	2½	3	3½	4	4½	5	6	8	10	12
Price, Brass Stem, Screwed....	8.00	10.50	14.50	18.00	21.00	28.00	32.00	44.00	85.00	135.00	200.00
Price, Brass Stem, Flanged....	9.75	12.50	17.50	21.50	25.00	32.00	36.00	49.00	91.00	145.00	220.00
Diameter of Flange, inches.....	6	6½	7½	8½	9	9¾	10½	12	14	20	20
Length face to face of Flange..	6	7	7½	9	10	11	12¼	14	19	24¼	26¾

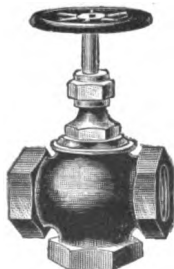


Fig. 55.

IRON CROSS VALVES.

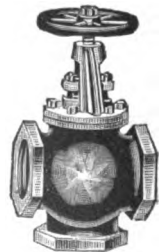


Fig. 56.

Size, inches.....	2	2½	3	3½	4	4½	5	6	8
Price, Screwed End, each.....	6.50	10.00	14.00	.....	.....	.....	.....	.....	.....
Price, Flange End, each.....	9.00	13.00	18.50	.....	.....	.....	.....	.....	.....
Price, Screwed End, Yoked, each.....	.....	.....	.....	23.00	27.00	35.00	40.00	54.00	105.00
Price, Flange End, Yoked, each.....	.....	.....	.....	28.25	33.00	41.00	46.00	61.50	114.00

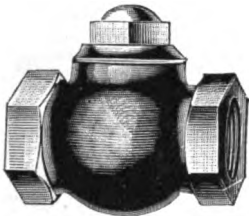


Fig. 57.

IRON CHECK VALVES.

Horizontal, Angle and Vertical.

Size, inches	2	2½	3	3½	4	4½	5	6	8	10	12
Price, Screwed, each..	3.75	6.25	9.75	12.75	15.00	20.00	24.00	33.00	65.00	110.00	170.00
Price, Flanged, each..	5.50	8.25	12.75	16.25	19.00	24.00	28.00	38.00	71.00	120.00	190.00

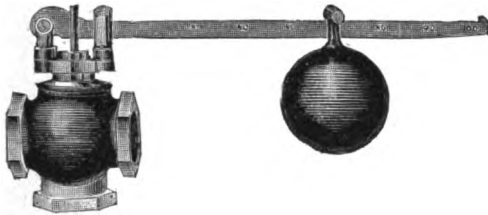


Fig. 58.

IRON SAFETY VALVES.

Size, inches	1	1¼	1½	2	2½	3	3½	4	4½	5	6	8
Price, Screwed, each...	3.50	5.00	6.00	8.00	13.00	18.00	24.00	30.00	36.00	44.00	60.00	145.00
Price, Flanged, each.....				10.50	16.00	22.50	29.25	36.00	42.00	50.00	67.50	154.00

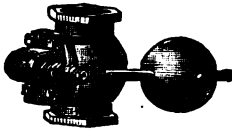


Fig. 59.

BACK PRESSURE VALVES.

Size, inches.....	2	2½	3	3½	4	5	6	8
Price, Screwed End, each.....	8.00	10.50	14.50	18.00	21.00	32.00	44.00	85.00
Price, Flanged End, each	9.75	12.50	17.50	21.50	25.00	36.00	49.00	91.00

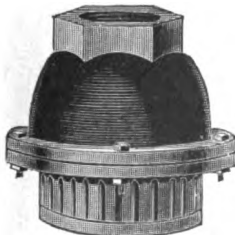


Fig. 60.

FOOT VALVES, WITH STRAINER.

Size, inches.....	1	1¼	1½	2	2½	3	3½	4	5	6	8
Price, each.....	1.50	1.75	2.50	3.25	4.25	5.50	7.50	10.00	13.00	24.00	50.00

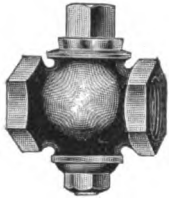


Fig. 61.

IRON COCKS.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6
Price, Iron Plug, each.....	.80	.90	1.25	1.50	2.00	2.60	4.50	6.50	12.00	16.00	33.00	45.00
Price, Brass Plug, each.....	1.20	1.60	2.00	2.75	4.00	5.00	9.50	13.50	30.00	40.00	.....	.....

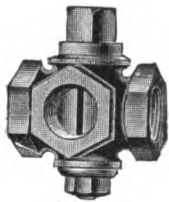


Fig. 62.

IRON THREE-WAY COCKS.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
Price, Iron Plug, each.....	1.30	1.75	2.00	2.75	4.00	6.00	8.50	15.00	20.00
Price, Brass Plug, each.....	2.00	2.50	3.25	4.75	6.50	11.00	15.50	33.00	44.00

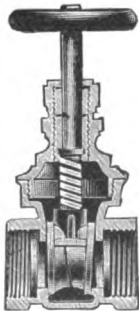
Straightway Double Gate Valves.**BRASS.**

Fig. 63—Sectional Cut.

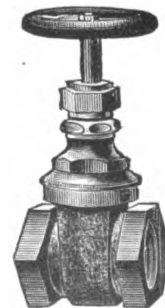


Fig. 64.

Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Screwed, each.....	1.10	1.10	1.20	1.20	1.75	2.50	3.50	5.00	7.50	15.00	22.00

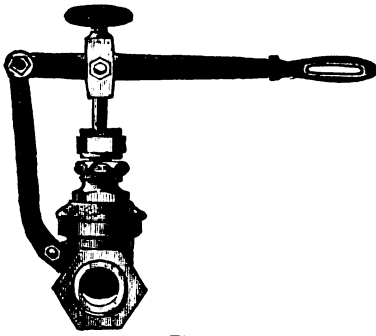


Fig. 65.

STRAIGHTWAY DOUBLE GATE VALVES.

With Quick Moving Slide Stem and Lever.

Size	1	1¼	1½	2	2½	3
Fig. 65, each	4.00	5.00	7.00	10.00	19.00	25.00



Fig. 66.

STRAIGHTWAY GATE VALVES.

Iron Body, Brass Mounted. Screwed or
Flanged Ends.

Size, inches.....	2	2½	3	3½	4	4½	5	6	7	8	10	12
Price, Screwed, each..	10.00	12.00	15.00	18.00	20.00	25.00	25.00	30.00	40.00	50.00	65.00	90.00
Price, Flanged, each...	10.00	12.00	15.00	18.00	20.00	25.00	25.00	30.00	40.00	50.00	65.00	90.00

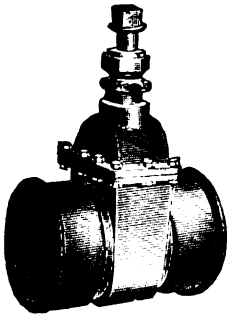


Fig. 67.

STRAIGHTWAY DOUBLE GATE VALVES.

FOR CAST, WATER OR GAS MAINS.

Iron Body, Brass Mounted, Hub End.

Size, inches.....	3	4	6	8	10	12
Price, each.....	15.00	20.00	30.00	50.00	65.00	90.00

ENGINE TRIMMINGS.

WATER GAUGES.



Fig. 68.

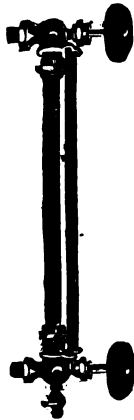


Fig. 69.

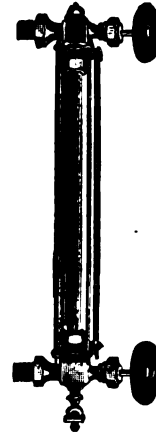


Fig. 70.

Fig. 68.	Rough,	$\frac{1}{2}$ x 10	Glass,	$\frac{3}{8}$	Iron Pipe, each.....	\$2.75
" 68.	"	$\frac{3}{8}$ x 12	"	$\frac{1}{2}$	" " ".....	3.00
" 69.	Finished,	$\frac{3}{8}$ x 12	"	$\frac{1}{2}$	" " ".....	4.25
" 70.	"	$\frac{3}{8}$ x 12	"	$\frac{1}{2}$	" " ".....	6.00
" 70.	"	$\frac{3}{4}$ x 16	"	$\frac{3}{4}$	" " ".....	7.50

SCOTCH GLASS TUBES.

For Water Gauges.

Length, inches.....	10	11	12	13	14	15	16	17	18	19	20	22	24	30	36	48
$\frac{3}{4}$ inch diameter, each	.55	.55	.55	.55	.60	.60	.65	.70	.75	.80	.85	.95	1.05	1.50	2.00	3.00
$\frac{5}{8}$ inch diameter, each	.40	.40	.45	.45	.50	.55	.60	.65	.70	.75	.80		1.00		1.70	2.00

Rubber Washers for same, 25 cents per dozen net.

Gauge Glass Cutters, \$2.50 each.

Red Reflecting Glasses same list.

STEAM WHISTLES.



Fig. 71.

Diameter of Bell, inches.....	1	1 1/4	1 1/2	2	2 1/2
Size of Pipe, inches.....	3/8	1/2	1/2	3/4	3/4
Without Valve (Fig. 71), each.....	1.70	2.00	2.50	3.25	4.50
With Valve (Fig. 72), each.....	3.50	3.75	4.00	4.75	6.50

Diameter of Bell, inches...	3	3 1/2	4	5	6	8	10	12
Size of Pipe, inches.....	1	1	1 1/4	1 1/2	2	2 1/2	3	3
Without Valve (Fig. 71), ea	6.00	8.50	11.00	18.00	24.00	65.00	125.00	250.00
With Valve (Fig. 72), ea..	8.00	11.00	14.00	22.00	30.00	80.00	175.00	350.00

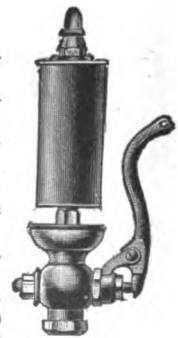


Fig. 72.

WHISTLE VALVES.

Size, of Pipe, inches..	$\frac{1}{4}$	$\frac{3}{4}$	1	1 1/4	1 1/2	2	2 1/2	3
Rough, each.....	2.25	2.75	3.25	4.00	5.50	9.50	20.00	30.00

GAUGE COCKS.

COMPRESSION, WITH SOFT METAL SEAT.



Fig. 73.

Will Chase (Iron Pipe Size), inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$
Diameter of Shank, inches.....	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, with Wood Handle, each.....	1.10	1.20	1.35

COMPRESSION, WITH STUFFING BOX, SOFT METAL SEAT.

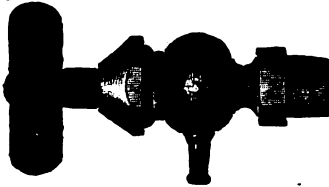


Fig. 74.

Will Chase (Iron Pipe Size), inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$
Diameter of Shank, inches.....		$\frac{3}{4}$	1
Price, with Wood Handle, each.....	1.30	1.40	1.55



Fig. 75.

MISSISSIPPI GAUGE COCKS.

Will Chase (Iron Pipe Size), inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$
Diameter of Shank, inches.....	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$	1
Price, each.....	.75	1.00	1.25	1.50

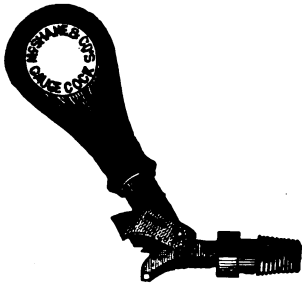


Fig. 76.

REGISTER GAUGE COCKS.

Diameter of Shank, inches.....	$\frac{3}{4}$	1
Will Chase (Iron Pipe Size), inches.....	$\frac{1}{2}$	$\frac{3}{4}$
Price, each.....	2.25	2.25

COCKS FOR STEAM GAUGES.



Fig. 77.

$\frac{1}{2}$ inch, each.....\$2.00

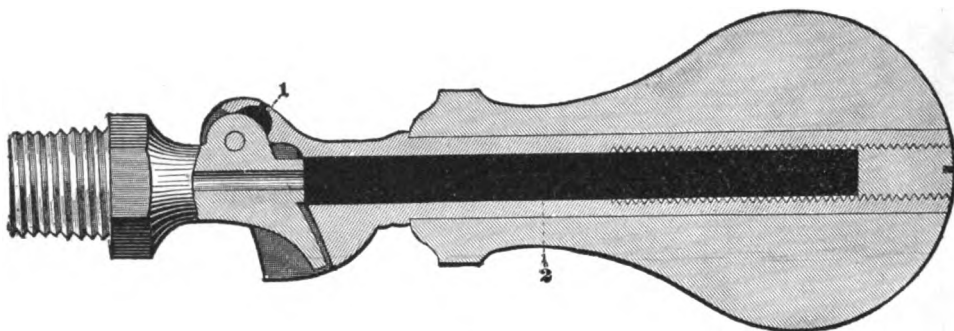
BALL GAUGE-COCK.

Fig. 78.

This Gauge-Cock is packed with the Jenkins Packing, and with proper care will last for years.

Price, $\frac{1}{2}$ inch	\$1.50
" $\frac{3}{4}$ "	1.50
Extra packing for do. each .....	.25

CYLINDER COCKS.

WITH SINGLE OR DOUBLE COUPLING.

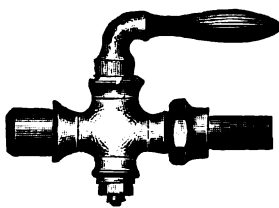


Fig. 79.

Diameter of Opening, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$
Diameter Blank Shanks, inches.....	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{8}$	$1\frac{3}{8}$	$1\frac{3}{8}$
Price, Rough, each, Single Coupling.....	1.50	1.75	2.00	2.50	3.25	5.00	8.00
" " " Double "	1.75	2.00	2.50	3.00	3.75	6.00	9.00
" Finished " Single "	1.75	2.00	2.50	3.00	3.75	6.00	9.00
" " " Double "	2.00	2.25	3.00	3.50	4.25	7.00	10.00

STEAM GAUGES.

Fig. 80.

Brass Case, 12	inch Dial, each.....	\$75.00
" " 10	" " ".....	40.00
Iron " 10	" " ".....	32.00
Brass " 8½	" " ".....	30.00
Iron " 8½	" " ".....	22.00
Brass " 6¾	" " ".....	20.00
Iron " 6¾	" " ".....	16.00
Brass " 6	" " ".....	16.00
" " 5½	" " ".....	12.00
Iron " 6	" " ".....	13.00
" " 5	" " ".....	8.00
Brass " 4½	" " ".....	10.00
Iron " 4½	" " ".....	8.00
Brass " 3½	" " ".....	9.00
Iron " 3½	" " ".....	7.00
Brass " 2½	" " ".....	8.00

Octagon Rings for No. 1 to No. 3, \$2.50 extra, *net*. Nickel Plating charged at cost.
~~Net~~ All Gauges graduated from open Mercury Column.



Fig. 81.

PRINDLE'S PAT. SYPHON COCK.

Will Drain Gauges when Steam is Off.

Price, each.....\$1.00



Fig. 82

SYPHON FOR STEAM GAUGE.

Size for Iron Pipe, inches.....	¼
Price, each.....	.50

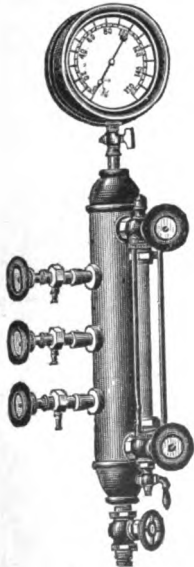


Fig. 83.

No. 1. Combination, Complete.....	\$20.00
With trimmings as follows:	
3 Comp. Gauge Cocks for ¾ Pipe.	
1 Fig. 69 Water Gauge.	
1 5-inch Dial Iron Case Steam Gauge.	
1 ½-Nipple, Globe Valve and Syphon,	
For ½-inch Steam Connections.	
No. 2. Combination, Complete.....	\$35.00
With trimmings as follows:	
3 Comp. Gauge Cocks for ½ Pipe.	
1 Fig. 69 Water Gauge.	
1 5-inch Dial Iron Case Steam Gauge.	
1 ½-Nipple, Globe Valve and Syphon,	
For ¾-inch Steam Connections.	
No. 3. Combination, Complete.....	\$50.00
With trimmings as follows:	
3 Comp. Gauge Cocks for ¾ Pipe.	
1 Fig. 70 Water Gauge.	
1 6-inch Iron Case Steam Gauge.	
1 1-Nipple, Globe Valve and Syphon,	
For 1-inch Steam Connections.	

If trimmings are wanted differing from those specified, please state that fact, and we will furnish to order.

BODIES ONLY.			
Number.....	1	2	3
Price, each.....	3.50	5.00	7.50

AIR COCKS.

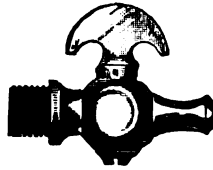


Fig. 84.

Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
Rough, each.....	.35	.40	.45	.55
Finished, each.....	.40	.45	.50	.60

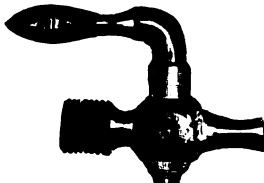


Fig. 85.

Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
Fig. 85, Finished, ea.	.55	.60	.65	.75
Size	$\frac{1}{8}$	$\frac{1}{4}$		
Fig. 86, Finished, each.....	.65	.75		

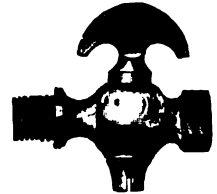


Fig. 86.

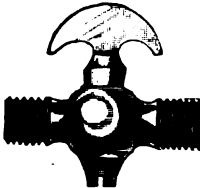


Fig. 87.

Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
Fig. 87, Finished, each.....	.45	.50	.90
Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
Fig. 88, Finished, each.....	.65	.70	.80

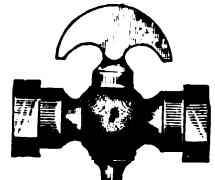


Fig. 88.

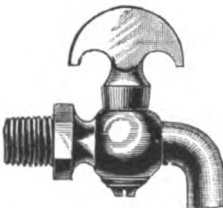


Fig. 89.

Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
Fig. 89, Finished, ea.	.65	.70	1.00	1.10
Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	
Fig. 90, Finished, each.....	.70	.90	1.25	

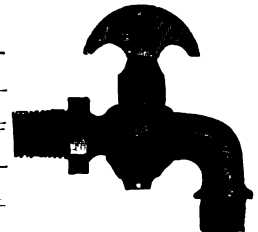


Fig. 90.

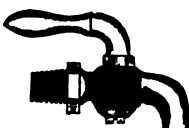


Fig. 91.

Size	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
Fig. 91, Finished, ea.	.80	.85	.90	1.00
Size.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
Fig. 92, Finished, ea.	.85	1.05	1.15	1.40

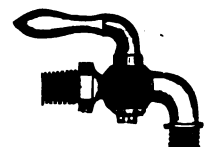




Fig. 92.

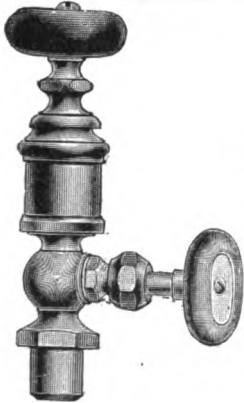
PLAIN OIL CUPS.**With Brass Tubes.**


Diameter of Body, inches.....	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3
Diameter of Shank, inches....	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{8}$
Will Chase (Iron Pipe Size).....	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$
Fig. 93. Price, each.....	.25	.30	.35	.40	.50	.60	.90	1.25	1.75	2.25	2.75	4.50

OIL CUPS.**With Tee or Lever Handle Cock.**


Diameter of Body, inches.....	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Diameter of Shank, inches	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{7}{8}$
Will Chase (Iron Pipe Size).....	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$
Price, Tee Handle, each.....	1.00	1.50	2.00	3.00
Price, Lever Handle, each.....	1.10	1.60	2.20	3.25

Fig. 94.

LUBRICATORS—WOOD HANDLE.


Diameter of Body, inches.....	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	3
Diameter of Shank, inches.	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$\frac{7}{8}$	$1\frac{1}{8}$	$1\frac{1}{8}$	$1\frac{1}{8}$
Will Chase (Iron Pipe Size).....	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Price, each.....	2.00	2.20	2.40	2.60	2.90	3.25	3.75	4.75
Price, with Air Cock, each.....	3.00	3.20	3.40	3.60	3.90	4.25	4.75	5.75

Fig. 95.

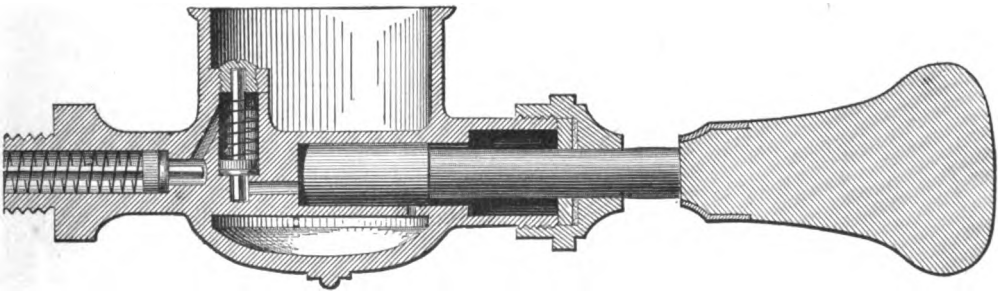
HAND CYLINDER OIL PUMP.

Fig 96

DESCRIPTION.	SIZE.	WITH SCREW TOP.	WITH STRAINER TOP.	EX. STRAINER TOPS.
Price, No. 3, Finished.....	2 x 2	3.50	3.65	0.40
" " 04, "	$2\frac{3}{4}$ x $2\frac{3}{4}$	5.00	5.25	0.60
" " 4, "	$3\frac{1}{2}$ x $3\frac{1}{2}$	7.50	7.80	0.75
" " 5, "	7 x $4\frac{1}{2}$	12.00	12.00	.....
" " 03, " Angle.....	2 x 2	3.50	3.65	0.40
" " 6, "	$2\frac{3}{4}$ x $2\frac{3}{4}$	5.00	5.25	0.60

Fifty cents extra will be charged when Globe Valves are sent with Pumps.

OIL PUMPS.

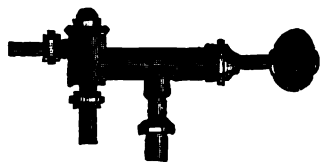


Fig. 97.

Fig. 97.....\$12.00

LEVER HANDLE OIL PUMPS.

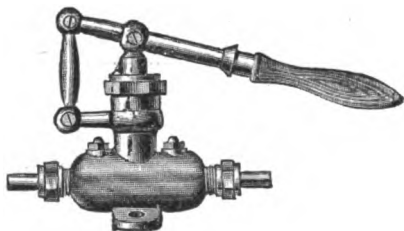


Fig. 98.

No. 1, each.....\$14.00 | No. 2, each.....\$16.00

GONG BELLS.

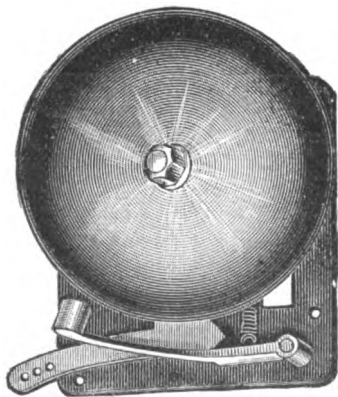


Fig. 99.

Diameter, inches.....	4	5	6	7	8	10	12	13
Trip, price, each.....	2.75	3.25	3.90	5.00	6.00	8.00	14.00	20.00
Locomotive, price, each.....	3.15	3.65	4.30	5.75	6.75	9.00	15.00	21.00

THE "STANDARD" PATENT SLIDE TOP OIL CUP.

Outside Adjustment. No Screw Caps.

PLAIN.

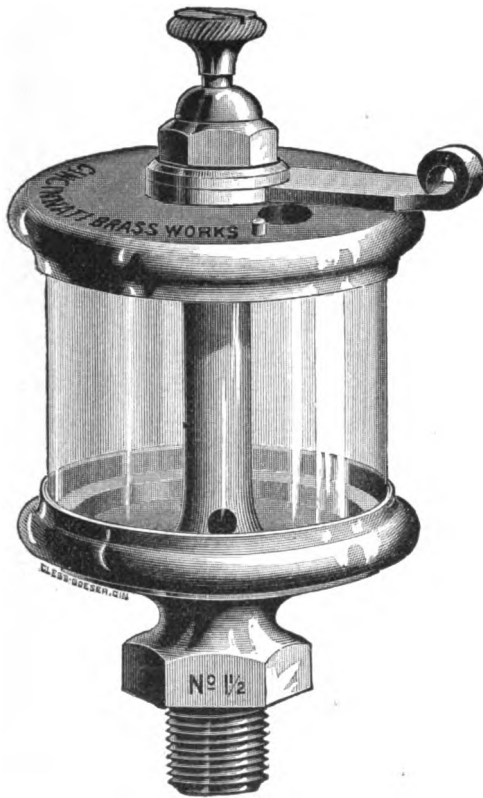


Fig. 100.

SIGHT FEED.

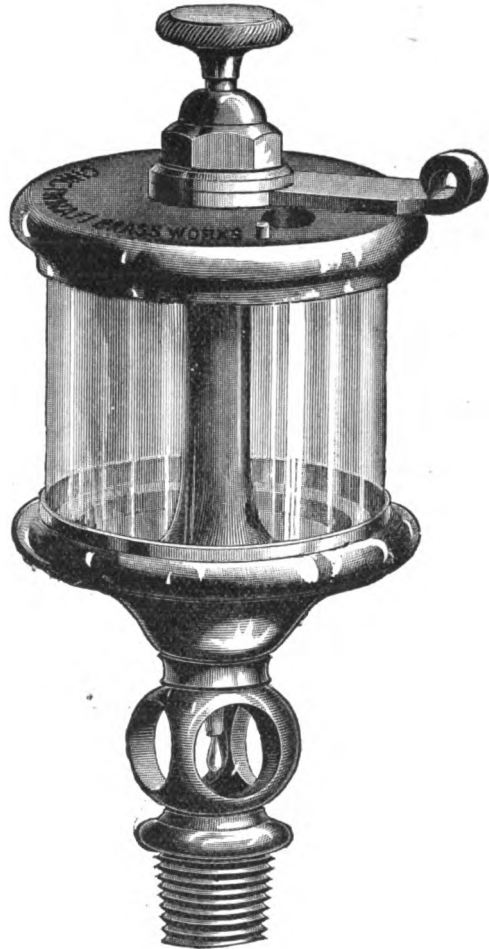


Fig. 101.

PRICE LIST PLAIN.

Number	000	00	0	1	1 1/2	2	3	4	5	6
Diameter of Glass, inches.....	1	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	3	3 1/2
Height of Glass, inches.....	7/8	1	1 1/8	1 1/4	1 1/2	1 3/8	2 1/8	2 1/4	3	4
Capacity			1/2 oz.	3/4 oz.	1 oz.	2 oz.	3 oz.	4 oz.	8 oz.	1 pt.
Pipe Thread.....	1/8	1/8	1/8	1/4	1/4	3/8	3/8	3/8	1/2	1/2
Price (Large and Small Base) each	.66	.70	.80	1.00	1.20	1.60	2.00	3.00	4.50	6.75

PRICE LIST WITH SIGHT FEED.

Number	00	0	1	1 1/2	2	3	4	5	6
Diameter of Glass, inches.....	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	3	3 1/2
Height of Glass, inches.....	1	1	1 1/4	1 1/2	1 3/8	2 1/8	2 1/4	3	4
Capacity		1/2 oz.	3/4 oz.	1 oz.	2 oz.	3 oz.	4 oz.	8 oz.	1 pt.
Pipe Thread.....	1/8	1/8	1/4	1/4	3/8	3/8	3/8	1/2	1/2
Price (Large and Small Base), ea.	1.40	1.50	1.70	1.95	2.35	2.75	4.00	5.50	7.75
Price, Extra Glasses, net.....	.06	.08	.10	.10	.12	.15	.25	.35	.65

THE DETROIT

(PARSHALL'S)

CONTINUOUS FEED LUBRICATING OIL CUPS.

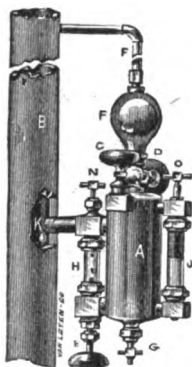


Fig. 102.

SIZE.	Plain Brass.	Nickel Plated.	Suitable for Engine with Diameter of Cylinder as follows:
Half Pint.....	22.00	25.00	Up to 10 inches.
Pint.....	30.00	35.00	10 to 18 inches.
Quart.....	45.00	50.00	18 to 30 inches.
Half Gallon.....	60.00	65.00	30 and over.

THE DETROIT

Single Connection Sight-Feed Lubricator.

For Portable Engines, Steam Yachts, Pumps, etc.

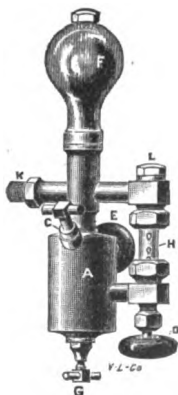


Fig. 103.

SIZE.	Brass Finish.	Nickel.	For Engine Cylinder.
One-Fourth Pint.....	15.00	18.00	Up to 5 inches.
One-Third Pint.....	17.00	20.00	5 to 8 inches.
One-Half Pint.....	22.00	25.00	8 to 12 inches.
One Pint.....	30.00	35.00	12 to 20 inches.

DIRECTIONS.

Attach Lubricator to any part of steam pipe.

Then fill Condenser F with water through plug on top of same, and Reservoir A with oil through Plug C. Open Valve E first, then regulate with Valve D. Should it be necessary to insert new glass, do so through Plug L.

The principle of applying lubricants, through the means of these Cups, is to introduce the oil continuously, drop by drop, into the column of steam, where it is *vaporized*, thus becoming a steam lubricant, which is carried to every part of the valves and cylinder, lubricating all alike.

In applying oils by the ordinary methods, it is well known that the part of the cylinder first reached receives *too much*, and the oil is wasted, being carried out by the first escape of steam, while other parts suffer from lack of proper lubrication. By means of these Cups this difficulty is entirely overcome.

THEIR ADVANTAGES OVER ALL OTHERS

Are: (1) They secure a perfect and uniform lubrication of every part. (2) Continuous and uniform feeding, fast or slow, the flow being regulated at will, and constantly in view. (3) Economy. The oil is distributed evenly over all the surface reached by the steam, securing perfect lubrication, *with a saving of from 50 to 90 per cent.* over ordinary methods of applying, and thus preventing friction and wearing of machinery. (4) They contain a glass indicator tube, which shows at all times the quantity of oil in the Lubricator, and a sight-feed glass, which shows how fast the oil is being used, drop by drop, passing in sight to the parts to be lubricated.

SPECIAL CATALOGUES OF THESE GOODS FURNISHED ON APPLICATION.

Improved Lock-Up Pop Safety Valves

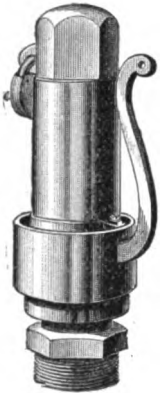


Fig. 104.

FOR STATIONARY ENGINES, THRESHING

ENGINES, YACHTS, PUMPS, ETC.

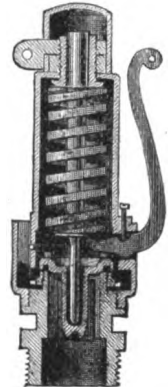


Fig. 105.

This is a Special Valve for Portable and Farm Engines.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
Price, each.....	8.00	10.00	15.00	20.00

In ordering, state pressure at which you wish to blow off.

WE MAKE THE FOLLOWING CLAIMS FOR THIS SAFETY VALVE:

Opens precisely at fixed working pressure.

Discharges all excess of steam above fixed working pressure.

Reduces the pressure rapidly upon opening.

Closes with least possible loss of steam.

The limits of pressure within which the Valve will open and close are adjustable.

Does not deteriorate under continued use.

Never sticks on seat.

These Valves are made to correspond with the requirements, and are used on locomotive, portable, steamboat, stationary and steam fire engine boilers, and for other purposes.

1 inch diameter.....	\$ 12.00
$1\frac{1}{4}$ " "	15.00
$1\frac{1}{2}$ " "	20.00
2 " "	30.00
$2\frac{1}{4}$ " "	40.00
$2\frac{1}{2}$ " "	50.00
3 " "	65.00
$3\frac{1}{2}$ " "	80.00
4 " "	100.00



Fig. 106.

Always state the pressure at which Valve shall open, and if for marine or stationary boilers.

Every Valve is tested and adjusted before shipping.

Lock-up attachment furnished when required.

The Michigan Automatic Injector.

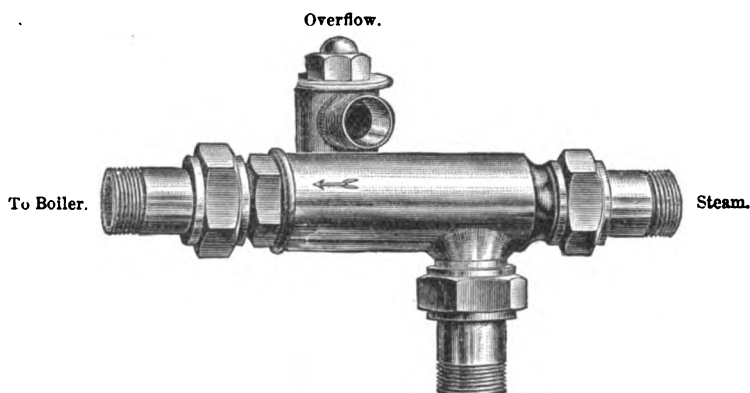


Fig. 107.

These Injectors are particularly adapted for Traction Engines, Marine Engines, and all other engines subject to severe jarring. For example: The Traction Engine on the road is subject to severe jars, and the hose or suction pipe is often drawn out of the water, thereby stopping Injector from delivering. When replaced, the Injector starts without the help of the engineer. This is accomplished by the automatic action of this Injector.

Number of Injector.	Price.	SIZE OF CONNECTION.			Gallons per hour 60 lbs. pressure, with 4 ft. lift.
		Suction.	Feed.	Steam.	
1	16.00	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	60
2	18.00	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	85
3	20.00	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	120
4	25.00	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	220
5	30.00	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	300
6	40.00	1	1	1	430
7	45.00	1	1	1	540
8	55.00	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	700
9	60.00	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{4}$	900
10	75.00	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	1260
11	90.00	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	1740
12	110.00	2	2	2	2230
13	125.00	2	2	2	2820
14	150.00	$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	3480

DIRECTIONS FOR CONNECTING.

Connect as shown in cut. Steam connections should be as close to the Boiler as convenient.

Do not connect with other steam pipes, but take steam direct from the Boiler.

Place a Globe valve in steam pipe for a starting valve, AND ONE IN SUCTION.

Place a check valve in the delivery pipe between Injector and Boiler.

Blow out steam pipes before connecting.

Be sure that suction connections are perfectly air tight. NO PACKING REQUIRED IN JOINTS OF INJECTOR.

For a high lift, make the suction one size larger than connections.

In suction pipe use as few elbows as possible.

DIRECTIONS FOR OPERATING.

To start Injector, open valve in steam pipe wide.

Regulate supply of water by valve in suction pipe.

A competent engineer will soon learn how to regulate his steam and water supply to produce the best results in his case.

Every machine is warranted to work satisfactorily if directions for connecting and operating are strictly followed.

This Injector is so simple in construction that it can be taken apart in a few minutes with an ordinary monkey wrench, and no trouble experienced in putting it together.

It is impossible for the suction pipe to get heated in the MICHIGAN AUTOMATIC INJECTOR.

SYPHONS AND EJECTORS.

SHERIFF'S PATENT PUMP

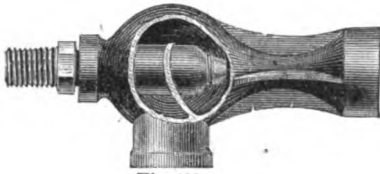


Fig. 108.

(Non-Freezing)

Is a most desirable apparatus for elevating water or liquids; is made of best composition, and is preferred on this account in localities where brackish water exists; also, is selected by tanners for their use. They are guaranteed to give good satisfaction in elevations not exceeding 35 feet. For greater elevations, see description of Defiance Pump.

CAPACITY AND PRICES OF SYPHON PUMPS.

Gas Pipe Size, inches.....	1	1¼	1½	2	2½	3	4	5	6
Delivery per hour in gallons, at 40 lb. steam pressure.....	800	1,050	1,600	3,000	4,500	7,000	8,800	10,000	12,000
Diameter of Steam Pipe.....	¾	1	1¼	1½	1¾	2	2½	3	3½
Diameter of Delivery Pipe.....	1	1¼	1½	2	2½	3	4	4½	6
Prices, Brass.....	10.00	15.00	20.00	24.00	28.00	32.00	52.00	72.00	96.00
Strainers for above.....	1.00	1.00	1.50	1.50	2.00	2.50	4.00	5.00	6.00

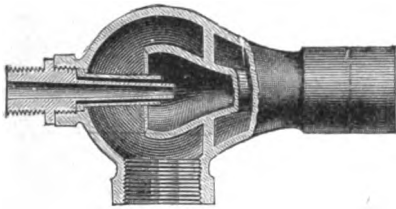


Fig. 109.

COLL'S PATENT EJECTOR

(Non-Freezing)

Is one of the most effective Steam Jet Pumps in the world, and is extensively used by Steamboats, Locomotives, Mills, etc. It is made of iron and is extra heavy, and therefore is in demand where hard usage is expected. This Pump is recommended for elevations not exceeding 35 feet. For greater elevations, see description of Defiance Pump.

CAPACITY AND PRICES OF SYPHON PUMPS.

Gas Pipe Size, inches.....	1	1¼	1½	2	2½	3	4	5	6
Delivery per hour in gallons, at 40 lbs. steam pressure.....	890	1,250	1,960	3,200	5,125	8,050	9,800	13,000	16,000
Diameter of Steam Pipe.....	¾	1	1¼	1½	1¾	2	2½	3	3½
Diameter of Delivery Pipe.....	1	1¼	1½	2	2½	3	4	5	6
Prices, iron.....	10.00	15.00	20.00	24.00	28.00	32.00	52.00	72.00	96.00
Strainers for above.....	1.00	1.00	1.50	1.50	2.00	2.50	4.00	5.00	6.00

COLL'S PAT. DEFIANCE PUMP.

(Absolutely Non-Freezing.)

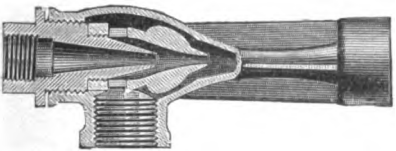


Fig. 110.

This Ejector is the very best of its class. It is constructed of the best composition, and recommended for Mines, Locomotives or Mills. These pumps are carefully tested and stamped with elevation and steam pressure, at which they are guaranteed to be effectual. The Defiance Pump is warranted to elevate water 75 feet with 50 lbs. steam pressure. *The Defiance Pump is Double-Acting, therefore it requires but half the steam of any Jet Pump in existence.*

CAPACITY AND PRICES FOR DEFIANCE PUMPS.

Gas Pipe Size, inches.....	¾	1	1¼	1½	2	2½	3	4	5	6
Delivery per hour in gallons at 50 lbs. steam pressure.....	280	350	350	1,400	2,300	2,800	3,500	6,000	13,000	16,000
Diameter of Steam Pipe.....	½	¾	¾	1	1	1¼	1¼	1½	2	2½
Diameter of Delivery Pipe.....	¾	1	1¼	1½	2	2½	3	4	5	6
Prices, Brass.....	12.00	16.00	25.00	35.00	50.00	65.00	85.00	100.00	150.00	200.00

Strainers for above accompany each pump without extra charge.

A Higher Pressure of Steam will give a corresponding Increased Result.

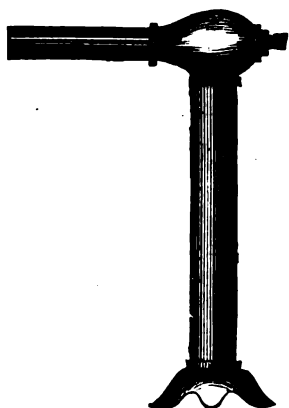


Fig. 111.
Coll Ejector—(Single-acting.)

BOAT AND BARGE PUMPS.

We construct these celebrated Pumps, as shown in the cut, for use on Steamboats in relieving Barges and Coal Boats of the leakage which may occur in conveying them to their destination. These Pumps are also much used by the Grain Boats for the purpose above mentioned. These Pumps are fitted with light iron pipes, which are carefully galvanized to prevent rusting, making them at once light to handle and at the same time durable. Reference need only be made to the hundreds of Ohio and Mississippi River Tow Boats having them in use to prove their utility.

Five Prices For Steamboat and Barge Lengths.

Fitted with Pipes and Strainer.

Size, inches.....	2½	3	4	5	6	8
Price of Single-acting Pump.....	40	50	80	115	150	200
Price of Double-acting Pump.....	65	85	100	150	200	300

THE "MODEL" EJECTOR.

Made of Best Steam Metal.



Fig. 112.

The "Model" Ejector is a very effective and economical substitute for a Steam Pump. It has no loose or moving parts; nothing to break, clog, or get out of order; requires absolutely no attention or skill to run it; no oil or packing; cannot rust or freeze; requires no adjustment or repairs, and is always ready for instant use. *They will lift and force water fifty feet*

Capacities of Ejectors are based on a working pressure of fifty pounds steam; from higher pressure better results will be obtained.

If possible, place the Ejector so that its lift may not be over ten feet, but in no case more than twenty feet. When over ten feet a check valve should always be used.

Size Ejector.....	A	B	C	D	E	F	G	H	I
Size Pipe, Supply and Discharge.....	½	¾	1	1¼	1½	2	2½	3	4
Size Steam Pipe.....	¾	1	1¼	1½	2	2½	3	4	5
Gallons per Hour.....	240	480	960	1,200	1,900	2,900	4,800	7,200	10,000
Price	7.50	10.00	13.00	17.00	22.00	30.00	40.00	55.00	75.00

BOX COIL.

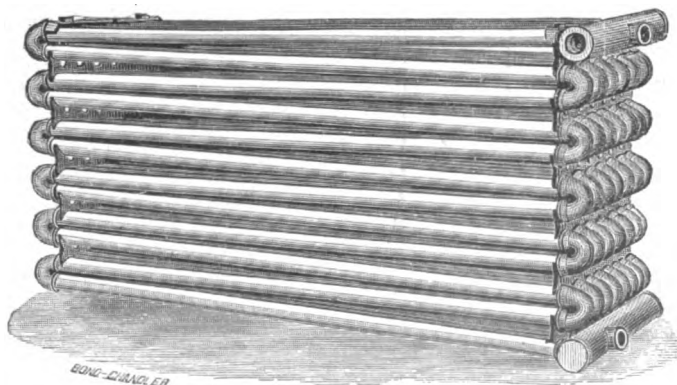


Fig. 113.

Coils of all Sizes and Styles furnished to order. Price on application.

Wrought Iron Tube Radiators.

RECTANGULAR.

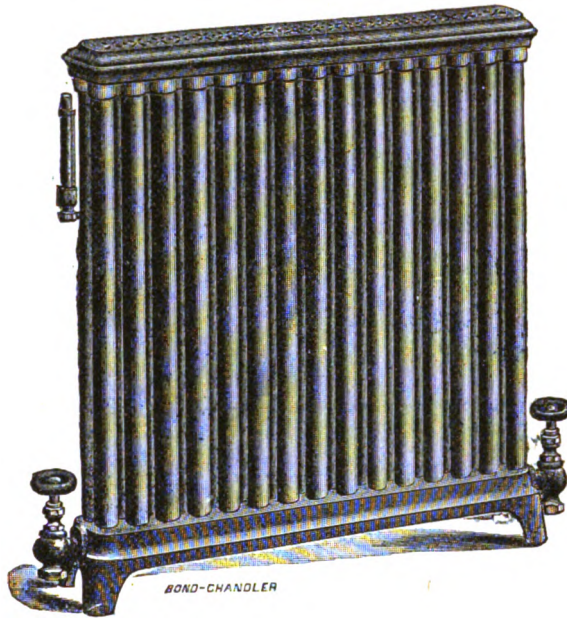


Fig. 114.

CIRCULAR.

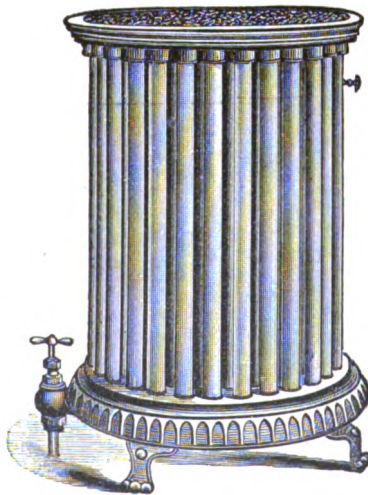


Fig. 115.

Special Catalogues and Prices on application.

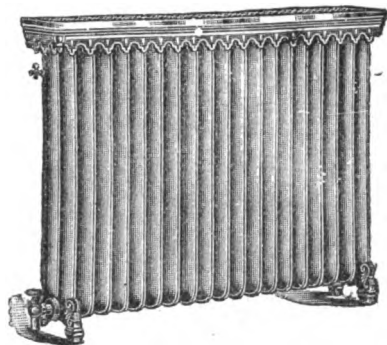
DETROIT RADIATORS—CAST IRON.

Fig. 116.

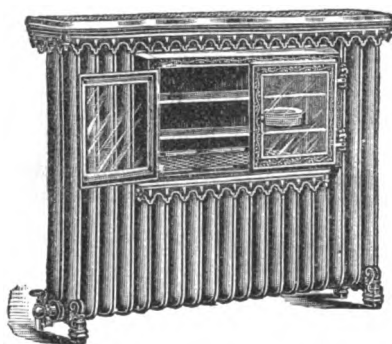
DINING ROOM STYLE.

Fig. 116.

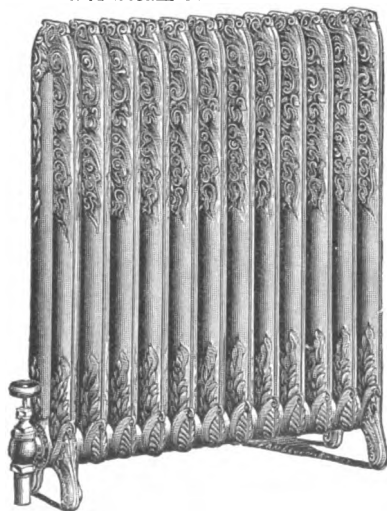
PERFECTION RADIATORS—CAST IRON.**For Steam or Hot Water.**

Fig. 117.

Prices named on application. Special Catalogues of these goods furnished.

BUNDY RADIATORS.

DIRECT RADIATOR.

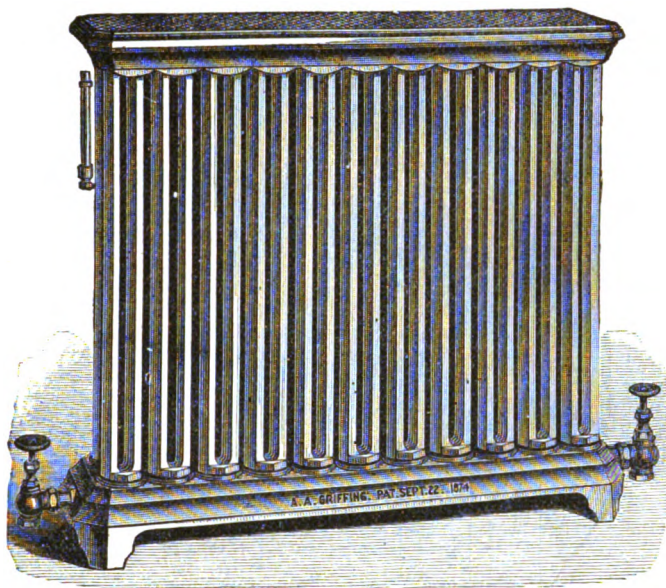


Fig. 118.

GOLD PIN—INDIRECT RADIATOR.

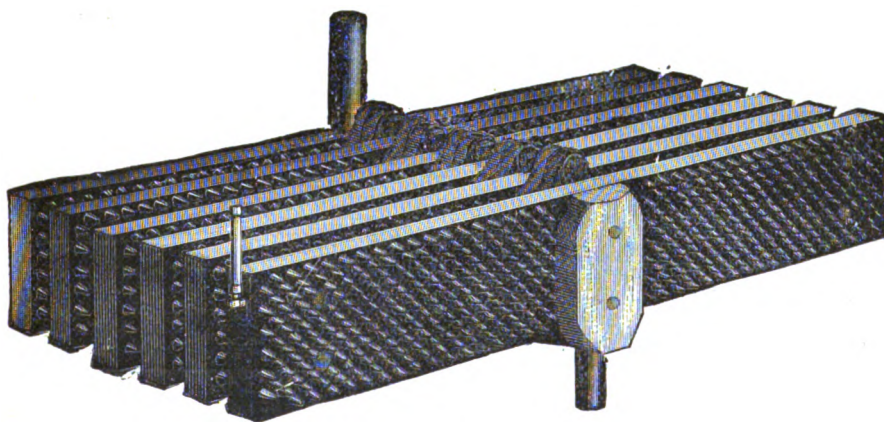


Fig. 119.

Catalogues containing full information regarding these goods, together with prices, furnished on application.

LOW PRESSURE DAMPER REGULATOR.



Fig. 120.

Price, each... \$10.00

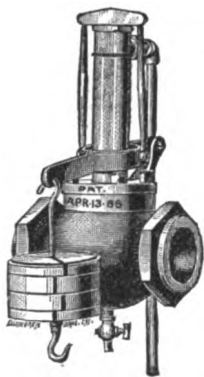


Fig. 121.

PRESSURE REGULATOR OR REDUCING VALVE.

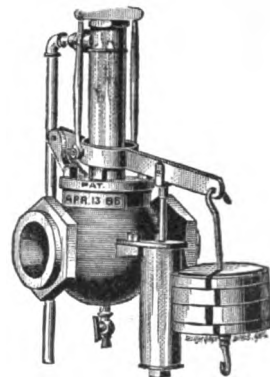


Fig. 121a.

PRICE FIG. 121.

Size, inches.....	1	1½	2	2½	3	3½	4	5	6	8	10
Screwed Ends.....	22.00	25.00	30.00	35.00	40.00	50.00	60.00				
Flanged Ends								75.00	100.00	150.00	225.00

PRICE FIG. 121a.

Size, inches.....	1	1½	2	2½	3	3½	4	5	6	8	10
Screwed Ends.....	27.00	30.00	36.00	42.00	48.00	58.00	70.00				
Flanged Ends.....								90.00	120.00	180.00	260.00

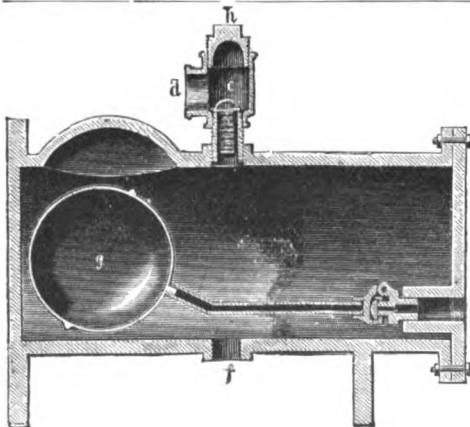


Fig. 122.

PATENT IMPROVED STEAM TRAPS.

SIZE.	Draining Capacity.	Price, each.
No. 1.....	1,500 feet of 1-in. pipe.	25.00
No. 2.....	4,000 " " "	35.00
No. 3.....	10,000 " " "	65.00

AUTOMATIC WATER FEEDER. FOR HIGH OR LOW PRESSURE.

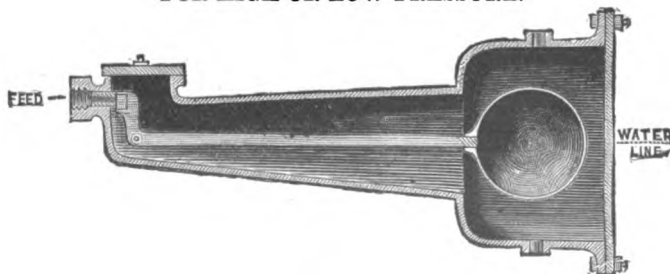


Fig. 123

Price, each.....\$20.00

PLUMBERS' BRASS GOODS.

PLAIN BIBBS.

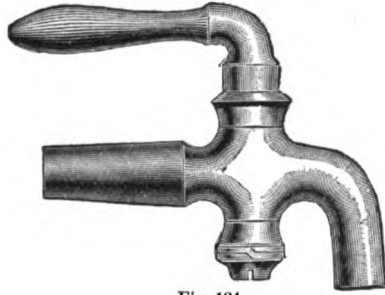


Fig. 124.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	10.00	12.00	15.00	18.00	24.00	36.00	60.00	84.00	170.00
Price, Nickel Plated, per doz.....	12.00	14.00	17.50	20.50	26.50	39.00	.....	.....	.....
Price, Silver Plated, per doz.....	17.00	20.00	24.00	30.00	39.00	62.00	.....	.....	.....

HOSE BIBBS.

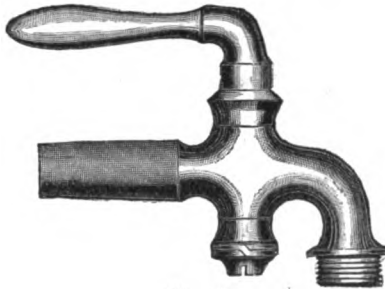


Fig. 125.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	16.00	19.00	26.00	39.00	64.00	90.00	180.00
Price, Nickel Plated, per doz.....	18.50	21.50	28.50	42.00	.....	.....	.....
Price, Silver Plated, per doz.....	25.00	31.00	41.00	65.00	.....	.....	.....

PLAIN BIBBS, FOR IRON PIPE.

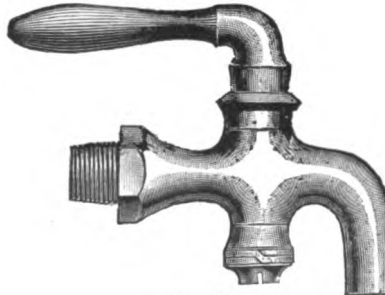


Fig. 126.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	11.00	13.00	16.00	19.00	26.00	39.00	64.00	90.00	180.00
Price, Nickel Plated, per doz.....	13.00	15.00	18.50	21.50	28.50	42.00	.....	.....	.....
Price, Silver Plated, per doz.....	18.00	21.00	25.00	31.00	41.00	65.00	.....	.....	.....
Price, Rough, per doz.....	10.00	12.00	15.00	17.00	23.00	35.00	56.00	78.00	160.00

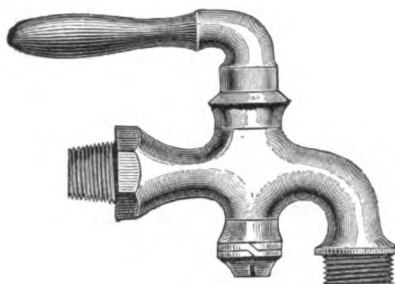
HOSE BIBBS, FOR IRON PIPE.

Fig. 127.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	17.00	20.00	28.00	42.00	68.00	96.00	190.00
Price, Nickel Plated, per doz.....	19.50	22.50	30.50	45.00	.....	.....	.....
Price, Silver Plated, per doz.....	26.00	32.00	43.00	68.00	.....	.....	.....
Price, Rough, per doz.....	16.00	18.00	25.00	38.00	60.00	84.00	170.00

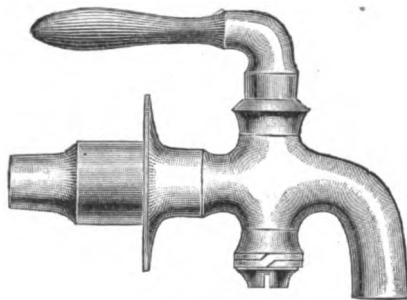
PLAIN BIBB, FLANGE AND THIMBLE.

Fig. 128.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	1
Price, Finished, per doz.....	19.00	24.00	28.00	40.00	53.00
Price, Nickel Plated, per doz.....	22.00	27.50	31.50	44.00	57.00
Price, Silver Plated, per doz.....	28.00	36.00	43.00	58.00	81.00
Price, Add if with Hose End, per doz.....	.....	1.00	1.00	2.00	3.00

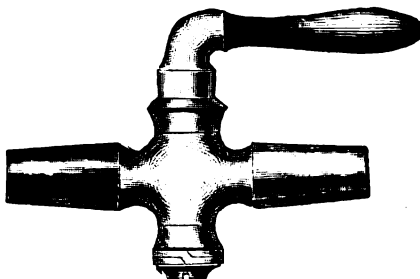
PLAIN STOP.

Fig. 129.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	10.50	12.50	15.50	18.50	25.00	37.00	62.00	175.00
Price, Nickel Plated, per doz.....	12.50	14.50	18.00	21.00	27.50	40.00	.....	.....
Price, Silver Plated, per doz.....	17.50	20.50	24.50	30.50	40.00	63.00	.....	.....

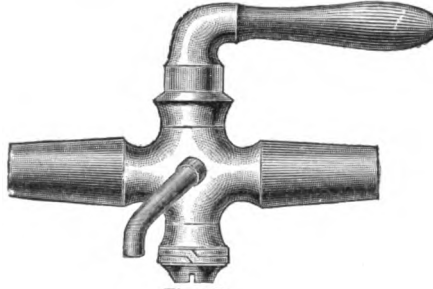
SHOWER BATH COCK.

Fig. 130.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	14.00	17.00	20.00	27.00	40.00
Price, Nickel Plated, per doz.....	16.00	19.50	22.50	29.50	43.00
Price, Silver Plated, per doz.....	22.00	26.00	32.00	42.00	66.00

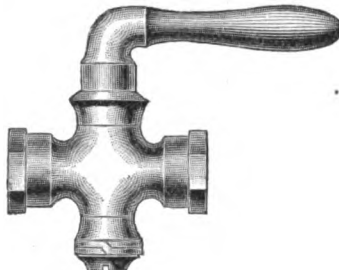
FINISHED STOP, SCREWED, FOR IRON PIPE.

Fig. 131.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	11.50	13.50	16.50	20.50	27.00	40.00
Price, Nickel Plated, per doz.....	13.50	15.50	19.00	23.00	29.50	43.00
Price, Silver Plated, per doz.....	18.50	21.50	25.50	32.50	42.00	66.00

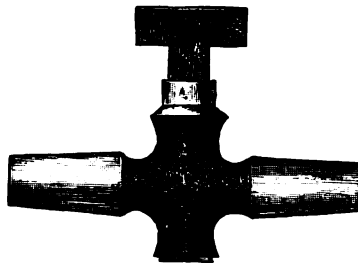
ROUGH STOP, T HANDLE, RIVET.

Fig. 132.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	6.50	8.50	11.50	14.50	18.50	27.00	45.00	62.00	105.00
Price, with Check and Waste, per doz.	7.50	9.50	12.50	15.50	20.00	29.00	48.00	66.00	115.00

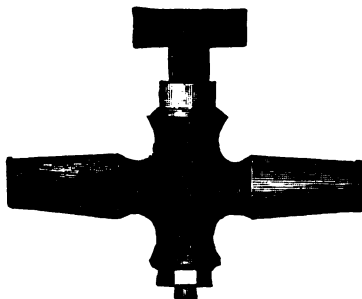
ROUGH STOP, T HANDLE, NUT AND WASHER.

Fig. 133.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	7.00	9.00	12.00	15.00	19.00	28.00	46.00	64.00	110.00
Price, with Check and Waste, per doz.	8.00	10.00	13.00	16.00	20.50	30.00	49.00	68.00	120.00

ROUGH STOP, T HANDLE, NUT AND WASHER.

For Lead and Iron Pipe.

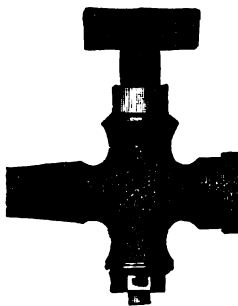


Fig. 134.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	7.50	9.50	12.50	16.00	20.00	29.50	48.00	67.00	115.00
Price, with Check and Waste, per doz.	8.50	10.50	13.50	17.00	21.50	31.50	51.00	71.00	125.00

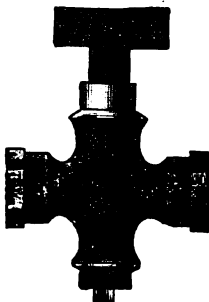
ROUGH STOP, T HANDLE, NUT AND WASHER, SCREWED FOR IRON PIPE.

Fig. 135.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	8.00	10.00	13.00	17.00	21.00	31.00	50.00	70.00	120.00
Price, with Check and Waste, per doz.	9.00	11.00	14.00	18.00	22.50	33.00	53.00	74.00	130.00

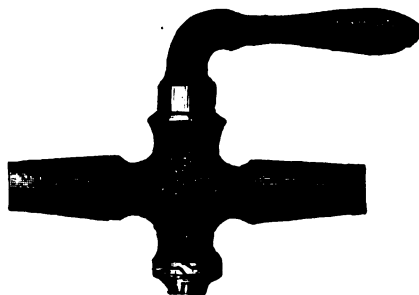
ROUGH STOP, LEVER HANDLE.

Fig. 137.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	7.00	9.00	12.00	15.00	19.00	28.00	46.00	64.00	110.00
Price, with Check and Waste, per doz.	8.00	10.00	13.00	16.00	20.50	30.00	49.00	68.00	120.00

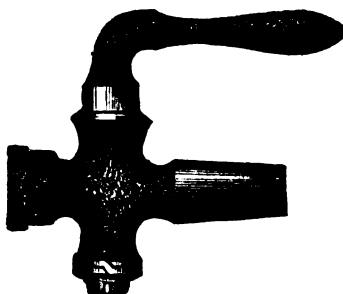
ROUGH STOP, LEVER HANDLE, FOR LEAD AND IRON PIPE.

Fig. 138.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	7.50	9.50	12.50	16.00	20.00	29.50	48.00	67.00	115.00
Price, with Check and Waste, per doz.	8.50	10.50	13.50	17.00	21.50	31.50	51.00	71.00	125.00

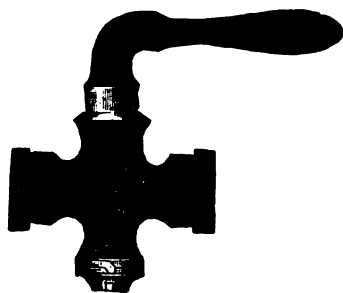
ROUGH STOP, LEVER HANDLE, SCREWED FOR IRON PIPE.

Fig. 139.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	8.00	10.00	13.00	17.00	21.00	31.00	50.00	70.00	120.00
Price, with Check and Waste, per doz.	9.00	11.00	14.00	18.00	22.50	33.00	53.00	74.00	130.00

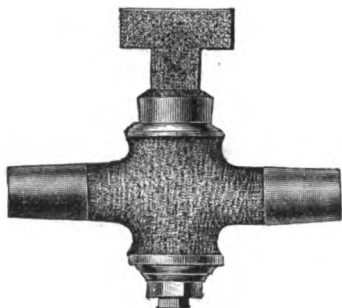
ROUGH STOP, T HANDLE, ROUND WAY, NUT AND WASHER.

Fig. 140

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	15.00	17.00	20.00	25.00	44.00	70.00	100.00	180.00
Price, with Check and Waste, per doz.....	16.00	18.00	21.00	26.50	46.00	73.00	104.00	190.00

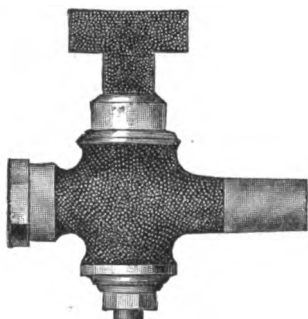
**ROUGH STOP, T HANDLE, ROUND WAY, NUT AND WASHER, FOR
LEAD AND IRON PIPE.**

Fig. 141.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	15.50	17.50	21.00	26.00	45.50	72.00	103.00	185.00
Price, with Check and Waste, per doz.....	16.50	18.50	22.00	27.50	47.50	75.00	107.00	195.00

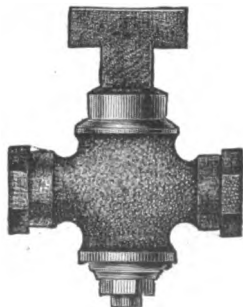
**ROUGH STOP, T HANDLE, ROUND WAY, NUT AND WASHER,
SCREWED FOR IRON PIPE.**

Fig. 142.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	16.00	18.00	22.00	27.00	47.00	74.00	106.00	190.00
Price, with Check and Waste, per doz.....	17.00	19.00	23.00	28.50	49.00	77.00	110.00	200.00

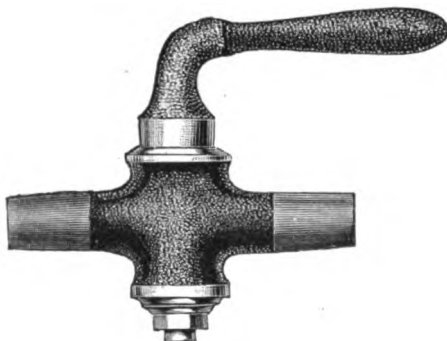
ROUGH STOP, LEVER HANDLE, ROUND WAY.

Fig. 143.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	15.00	17.00	20.00	25.00	44.00	70.00	100.00	180.00
Price, with Check and Waste, per doz.....	16.00	18.00	21.00	26.50	46.00	73.00	104.00	190.00

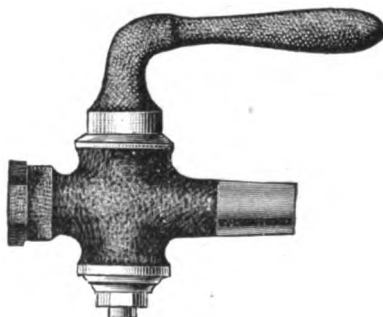
ROUGH STOP, LEVER HANDLE, ROUND WAY, FOR LEAD AND IRON PIPE.

Fig. 144.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	15.50	17.50	21.00	26.00	45.50	72.00	103.00	185.00
Price, with Check and Waste, per doz.....	16.50	18.50	22.00	27.50	47.50	75.00	107.00	195.00

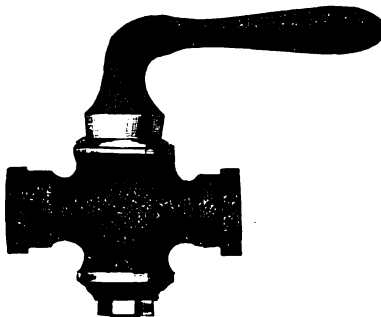
ROUGH STOP, LEVER HANDLE, ROUND WAY, SCREWED FOR IRON PIPE..

Fig. 145.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Plain, per doz.....	16.00	18.00	22.00	27.00	47.00	74.00	106.00	190.00
Price, with Check and Waste, per doz.....	17.00	19.00	23.00	28.50	49.00	77.00	110.00	200.00

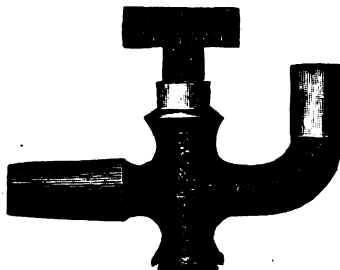
HYDRANT COCK, RIVET.

Fig. 146.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	13.50	16.50	20.50	32.00

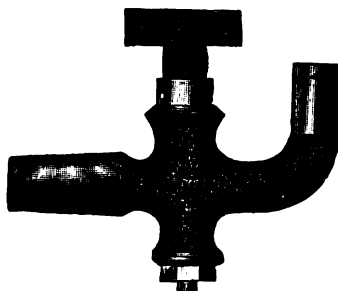
HYDRANT COCK, NUT AND WASHER.

Fig. 147.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	14.00	17.00	21.00	33.00

HYDRANT COCK, NUT AND WASHER.

For Lead and Iron Pipe.

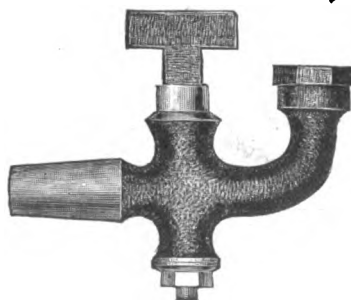


Fig 148.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	14.50	18.00	22.00	34.50

HYDRANT COCK, NUT AND WASHER.

Screwed for Iron Pipe.

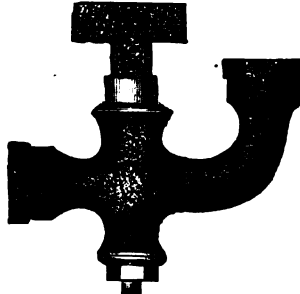


Fig. 149.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	15.00	18.50	23.00	36.00

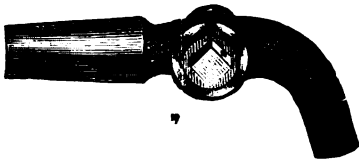
BALL COCK.

Fig. 150.

BALL COCK.
Screwed for Iron Pipe.

Fig. 151.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$
Price, Fig. 150, per doz.....		10.00	12.00	15.00	19.50	30.00	50.00
Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	
Price, Fig. 151, per doz.....	11.00	13.00	16.50	21.50	33.00	54.00	

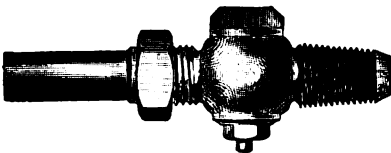
CORPORATION STOP.Screwed for Mueller Tapping Machine,
Straight or Bent Coupling.

Fig. 152.

Screwed for Mueller Tapping
Machine and Iron Pipe.

Fig. 153.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, each, Fig. 152.....	1.20	1.35	1.70	2.50	3.85

Size, inches.....	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, each, Fig. 153.....	1.10	1.40	2.10	3.35

Special Corporation Cocks of every description furnished to order.

COMPRESSION WORK.

COMPRESSION

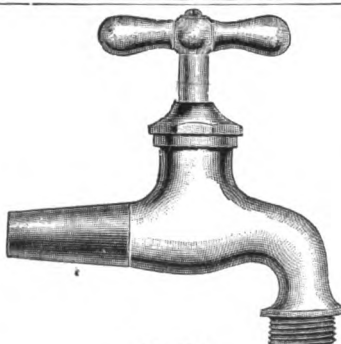


PLAIN BIBB.

Fig. 154.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	9.00	10.00	12.00	18.00	34.00	52.00	80.00	160.00
Price, Nickel Plated, per doz.....	11.00	12.50	14.50	20.50	37.00	.....	.....	.....
Price, Silver Plated, per doz.....	17.00	19.00	24.00	33.00	60.00	.....	.....	.....

COMPRESSION



HOSE BIBB.

Fig. 155.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	10.00	11.00	13.00	20.00	37.00	56.00	86.00	170.00
Price, Nickel Plated, per doz.....	12.00	13.50	15.50	22.50	40.00	.....	.....	.....
Price, Silver Plated, per doz.....	18.00	20.00	25.00	35.00	63.00	.....	.....	.....

COMPRESSION

Screwed for Iron Pipe.



PLAIN BIBB,

With Shoulder.

Fig. 156.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	10.00	11.00	13.00	20.00	37.00	56.00	86.00	170.00
Price, Nickel Plated, per doz.....	12.00	13.50	15.50	22.50	40.00	.....	.....	.....
Price, Silver Plated, per doz.....	18.00	20.00	25.00	35.00	63.00	.....	.....	.....

COMPRESSION HOSE BIBB, SCREWED FOR IRON PIPE, WITH SHOULDER.



Fig. 157.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, Finished, per doz.....	11.00	12.00	14.00	22.00	40.00	60.00	92.00	180.00
Price, Nickel Plated, per doz.....	13.00	14.50	16.50	24.50	43.00	.....	.....	.....
Price, Silver Plated, per doz.....	19.00	21.00	26.00	37.00	66.00	.....	.....	.....

COMPRESSION PLAIN BIBB, FLANGE AND THIMBLE.

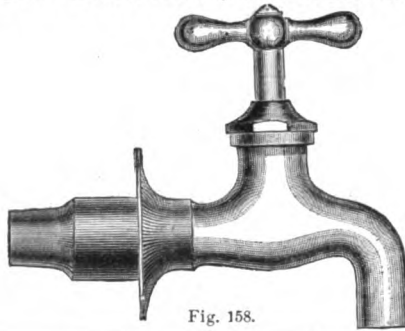


Fig. 158.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	16.00	18.00	21.00	28.00	51.00
Price, Nickel Plated, per doz.....	19.00	21.50	24.50	32.00	55.00
Price, Silver Plated, per doz.....	25.00	30.00	36.00	46.00	79.00

COMPRESSION HOSE BIBB, FLANGE AND THIMBLE.

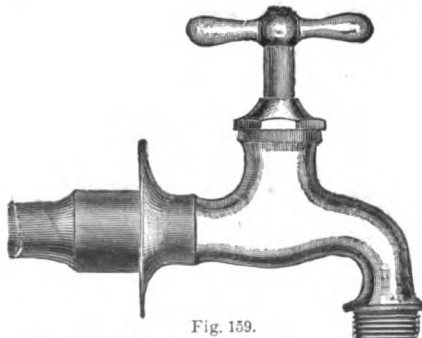


Fig. 159.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	17.00	19.00	22.00	30.00	54.00
Price, Nickel Plated, per doz.....	20.00	22.50	25.50	34.00	58.00
Price, Silver Plated, per doz.....	26.00	31.00	37.00	48.00	82.00

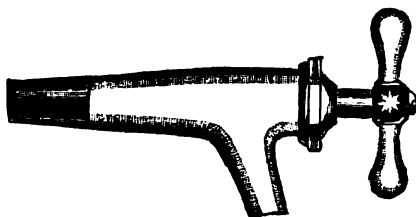
COMPRESSION WASH TRAY BIBB.

Fig. 160.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	10.00	11.00	13.00	19.00	36.00
Price, Nickel Plated, per doz.....	12.00	13.50	15.50	21.50	39.00

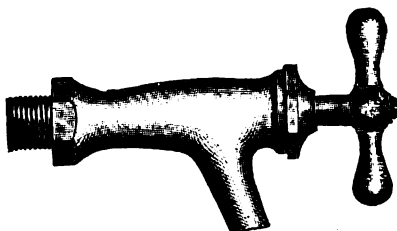
COMPRESSION WASH TRAY BIBB, SCREWED FOR IRON PIPE.

Fig. 161.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	11.00	12.00	14.00	21.00	39.00
Price, Nickel Plated, per doz.....	13.00	14.50	16.50	23.50	42.00

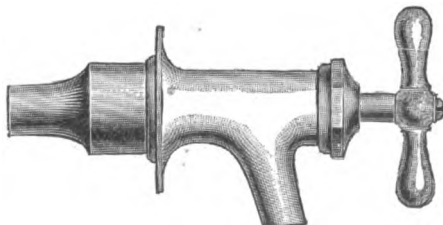
COMPRESSION WASH TRAY BIBB, FLANGE AND THIMBLE.

Fig. 162.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	17.00	19.00	22.00	30.00	53.00
Price, Nickel Plated, per doz.....	20.00	22.50	25.50	34.00	57.00

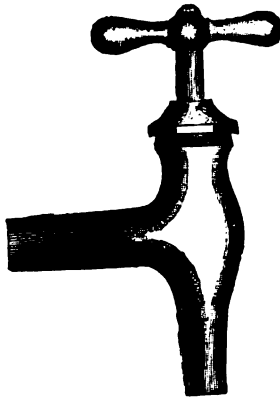
COMPRESSION BATH BIBB.

Fig. 163.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	14.00	17.00	26.00	42.00
Price, Nickel Plated, per doz.....	16 50	19.50	28.50	45.00
Price, Silver Plated, per doz.....	23.00	29.00	41.00	68.00

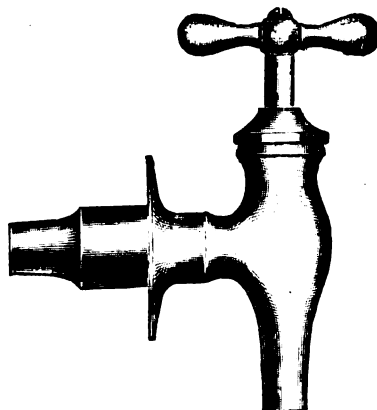
COMPRESSION BATH BIBB, FLANGE AND THIMBLE.

Fig. 164.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	22.00	26 00	36.00	59.00
Price, Nickel Plated, per doz.....	25.50	29.50	40.00	63.00
Price, Silver Plated, per doz.....	34.00	41.00	54.00	87.00

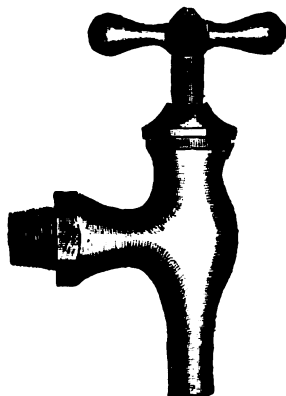
COMPRESSION BATH BIBB, SCREWED FOR IRON PIPE

Fig. 165.

Size, inches	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	15.00	18.00	28.00	45.00
Price, Nickel Plated, per doz.....	17.50	20.50	30.50	48.00
Price, Silver Plated, per doz.....	24.00	30.00	43.00	71.00

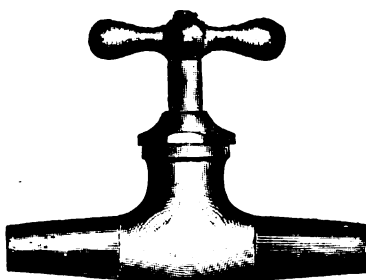
COMPRESSION STOP.

Fig. 166.

Size, inches	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	1
Price, Finished, per doz.....	10.00	11.00	13.00	19.50	36.00
Price, Nickel Plated, per doz.....	12.00	13.50	15.50	22.00	39.00
Price, Silver Plated, per doz.....	18.00	20.00	25.00	34.50	62.00

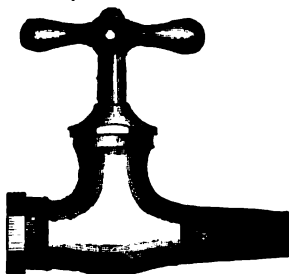
COMPRESSION STOP, FOR LEAD AND IRON PIPE.

Fig. 167.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	1
Price, Finished, per doz.....	10.50	11.50	14.00	20.50	37.00
Price, Nickel Plated, per doz.....	12.50	14.00	16.50	23.00	40.00
Price, Silver Plated, per doz.....	18.00	20.50	26.00	38.50	68.00

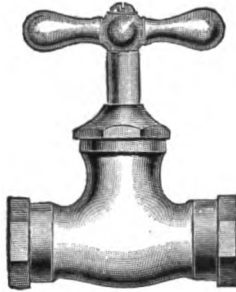
COMPRESSION STOP, SCREWED FOR IRON PIPE.

Fig. 168.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	11.00	12.00	15.00	21.50	39.00
Price, Nickel Plated, per doz.....	13.00	14.50	17.50	24.00	42.00
Price, Silver Plated, per doz.....	19.00	21.00	27.00	36.50	65.00

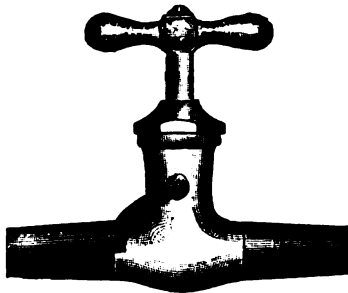
COMPRESSION SHOWER BATH COCK.

Fig. 169.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	1
Price, Finished, per doz.....	12.00	14.00	20.50	37.00
Price, Nickel Plated, per doz.....	14.50	16.50	23.00	40.00
Price, Silver Plated, per doz.....	21.00	26.00	35.50	63.00

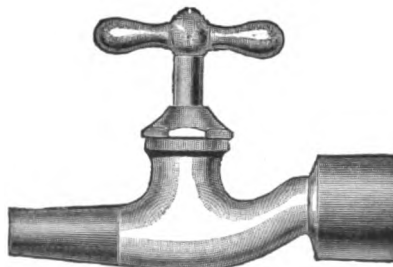
COMPRESSION URINAL COCK.

Fig. 170.

Size, inches.....	$\frac{1}{2}$
Price, Finished, per doz.....	18.00
Price, Nickel Plated, per doz.....	21.00
Price, Silver Plated per doz.....	28.00

COMPRESSION SILL COCK.

Fig. 171.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$
Price, Finished, per doz.....	28.00	28.00
Price, Nickel Plated, per doz.....	32.00	32.00

COMPRESSION HOPPER COCK,**COMPRESSION HOPPER COCK.**

Screwed for Iron Pipe.

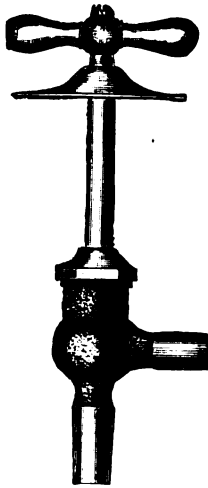


Fig. 172.

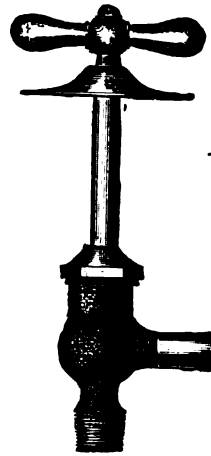


Fig. 173.

Size, inches, Fig. 172.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$
Price, Rough, Finished Flange and Handle, per doz.....	16.00	19.00	24.00
Price, Rough, Nickel Plated Flange and Handle, per doz.....	18.50	21.50	26.50
Price, Rough, Silver Plated Flange and Handle, per doz.....	25.00	31.00	39.00
Size, inches, Fig. 173.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$
Price, Rough, Finished Flange and Handle, per doz.....	17.00	20.00	26.00
Price, Rough, Nickel Plated Flange and Handle, per doz.....	19.50	22.50	28.50
Price, Rough, Silver Plated Flange and Handle, per doz.....	26.00	32.00	41.00

COMPRESSION HYDRANT COCK.

Fig. 174.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	14.00	17.00	22.00	38.00

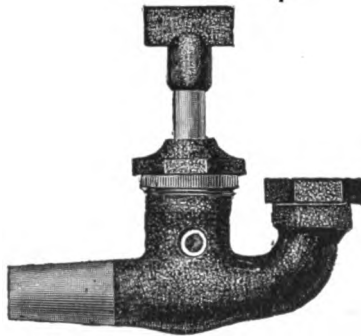
COMPRESSION HYDRANT COCK, FOR LEAD AND IRON PIPE.

Fig. 175.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	14.50	18.00	23.00	39.50

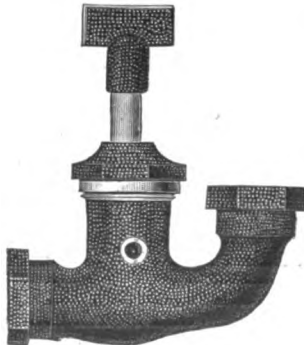
COMPRESSION HYDRANT COCK, SCREWED FOR IRON PIPE.

Fig. 176.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	15.00	19.00	24.00	41.00

COMPRESSION BALL COCK, FOR LEAD PIPE,

Fig. 177.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Fig. 177, per doz.....	8.50	9.50	11.00	17.00	30.00

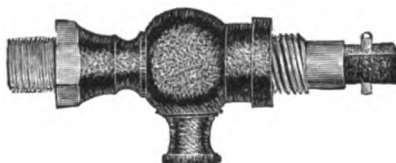
COMPRESSION BALL COCK, SCREWED FOR IRON PIPE.

Fig. 178.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1
Price, Fig. 178, per doz.....	9.50	10.50	12.00	19.00	33.00

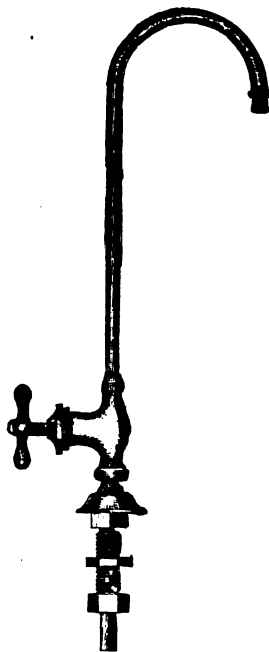
COMPRESSION PANTRY COCK.

Fig. 179.

PLAIN END.

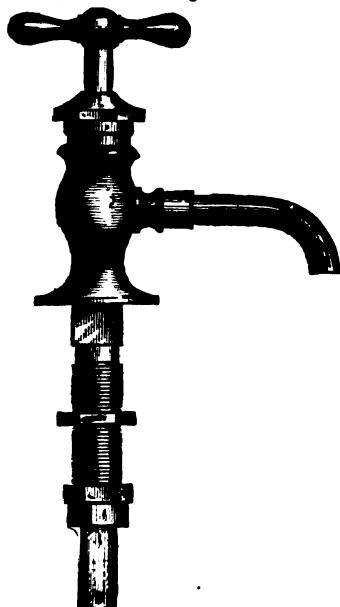
Price, Finished, per doz.....	30.00
Price, Nickel Plated, per doz.....	34.00
Price, Silver Plated, per doz.....	45.00

HOSE END.

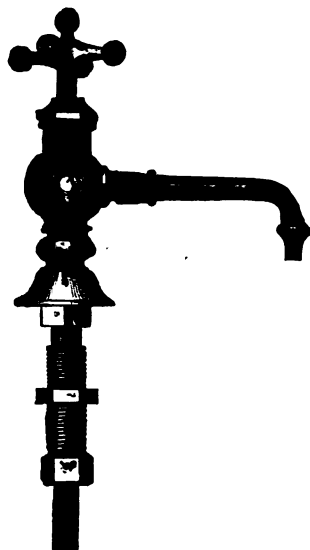
Price, Finished, per doz.....	33.00
Price, Nickel Plated, per doz.....	37.00
Price, Silver Plated, per doz.....	48.00

COMPRESSION BASIN COCKS.

Tee Handle.—Fig. 180.



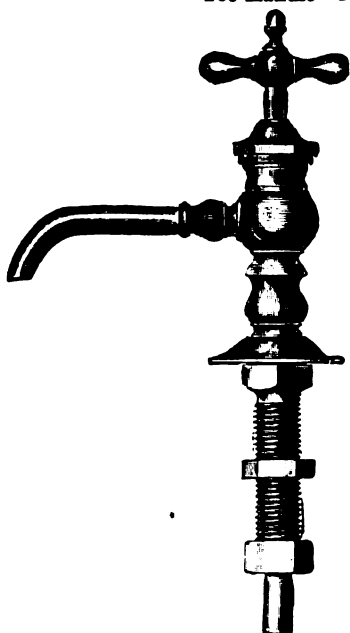
Cross Handle.—Fig. 180½.



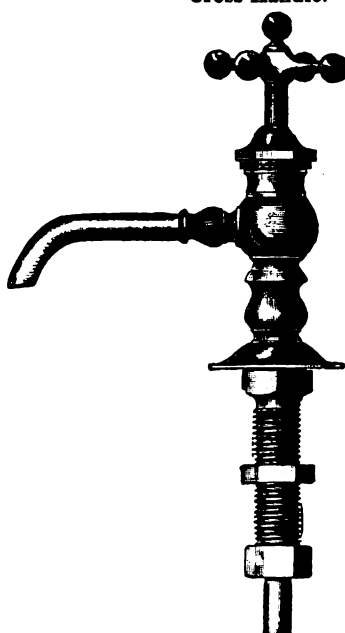
Price, Fig. 180, Finished, per doz.....	16.00
Price, Fig. 180, Nickel Plated, per doz.....	19.00
Price, Fig. 180, Silver Plated, per doz.....	25.00
Add for Large Tube, per doz.....	2.00
Add for 4 Arm, per doz.....	1.00

Price, Fig. 180½, Finished, per doz., T Handle.	20.00
Price, Fig. 180½, Nickel Plated, per doz., "	24.00
Price, Fig. 180½, Silver Plated, per doz., "	34.00
Add for Large Tube, per doz.....	2.00
Add for 4 Arm, per doz.....	2.00

Tee Handle.—Fig. 181.



Cross Handle.—Fig. 182.



Price, Fig. 181, Finished, per doz.....	24.00
Price, Fig. 181, Nickel Plated, per doz.....	28.00
Price, Silver Plated, per doz.....	36.00
Add for Fancy 4 Arm Handle.....	4.00

Price, Fig. 182, Finished, per doz.....	26.00
Price, Fig. 182, Nickel Plated, per doz.....	30.00
Price, Silver Plated, per doz.....	40.00

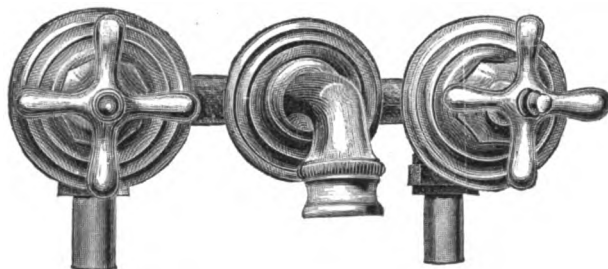
COMPRESSION DOUBLE BATH COCK.

Fig. 183.

Price, Finished, each	5.00
Price, Nickel Plated, each.....	5.50
Price, Silver Plated, each.....	7.00

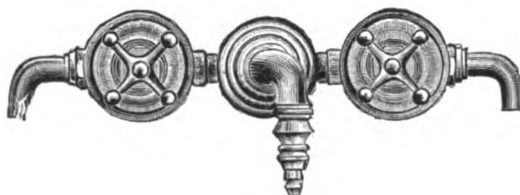
**COMPRESSION DOUBLE BATH COCK, HANDLES
IN FRONT.**

Fig. 184.

Price, Finished, each.....	7.00
Price, Nickel Plated, each.....	7.50
Price, Silver Plated, each.....	9.00

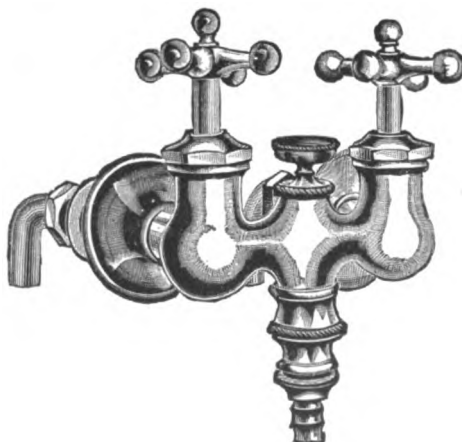
COMPRESSION DOUBLE BATH COCK, WITH RING CUP.

Fig. 185.

Price, Finished, each	7.50
Price, Nickel Plated, each.....	8.00
Price, Silver Plated, each.....	9.50

SELF-CLOSING WORK.

TELEGRAPH PLAIN BIBB.

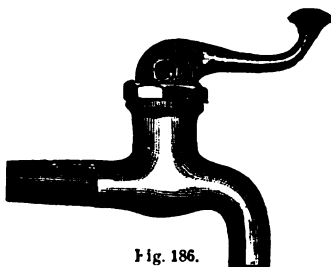


Fig. 186.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
Price, Finished, per doz.....	15.00	17.00	20.00	26.00
Price, Nickel Plated, per doz.....	17.00	19.50	22.50	28.50
Price, Silver Plated, per doz.....	23.00	26.00	32.00	41.00

TELEGRAPH PLAIN BIBB, SCREWED FOR IRON PIPE.



Fig. 187.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$
Price, Finished, per doz.....	16.00	18.00	21.00	28.00
Price, Nickel Plated, per doz.....	18.00	20.50	23.50	30.50
Price, Silver Plated, per doz.....	24.00	27.00	33.00	43.00

SELF-CLOSING HOPPER COCK.

For Lead Pipe.

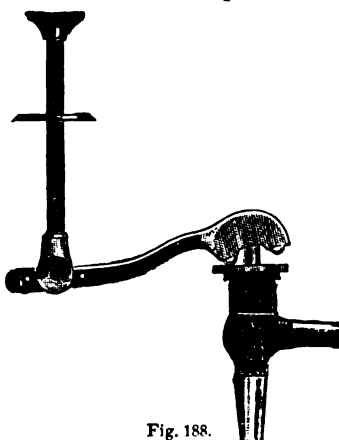


Fig. 188.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$
Price, Finished Flange and Handle, per doz.....	24.00	26.00	30.00
Price, Nickel Plated Flange and Handle, per doz.....	26.00	28.50	32.50
Price, Silver Plated Flange and Handle, per doz.....	33.00	38.00	45.00

LONG SELF-CLOSING HOPPER COCK.

For Lead and Iron Pipe.

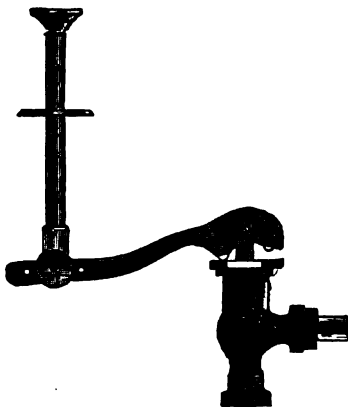


Fig. 189.

Size, inches.....	$\frac{1}{2}$
Price, Finished Flange and Handle, per doz.....	30 00
Price, Nickel Plated Flange and Handle, per doz.....	32.50
Price, Silver Plated Flange and Handle, per doz.....	39.00

SELF-CLOSING HOPPER COCK.

Single.

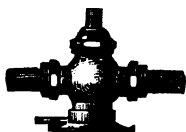


Fig. 190.

Price, per doz..... 26.00

SELF-CLOSING HOPPER COCK.

Double.

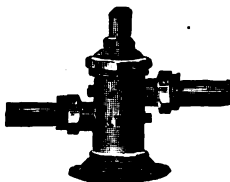


Fig. 191.

Price, per doz..... 40.00

ZANE OR BOSTON SELF-CLOSING WORK.

PLAIN BIBB FOR LEAD PIPE.



Fig. 192.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	21.00	24.00	27.00	72.00
Price, Nickel Plated, per doz.....	36.00	39.00	42.00	.....
Price, Silver Plated, per doz.....	39.00	42.00	51.00	.....

PLAIN BIBB FOR IRON PIPE.

Fig. 193. (Not Illustrated.)

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	25.00	28.00	31.00	78.00
Price, Nickel Plated, per doz.....	40.00	43.00	46.00	.....
Price, Silver Plated, per doz.....	43.00	46.00	55.00	.....

STOP FOR LEAD PIPE.

Fig. 194. (Not Illustrated.)

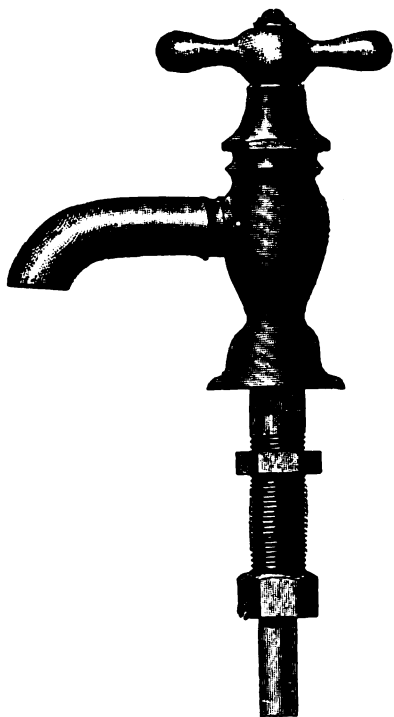
Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$
Price, Finished, per doz.....	24.00	27.00
Price, Nickel Plated, per doz.....	39.00	42.00
Price, Silver Plated, per doz.....	42.00	51.00

STOP FOR IRON PIPE.

Fig. 195. (Not Illustrated.)

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$
Price, Finished, per doz.....	32.00	35.00
Price, Nickel Plated, per doz.....	47.00	50.00
Price, Silver Plated, per doz.....	50.00	59.00

ZANE OR BOSTON SELF-CLOSING WORK.



BASIN COCK.

Fig. 196.

Price, Finished, per doz.....	45.00
Price, Nickel Plated, per doz.....	48.00
Price, Silver Plated, per doz.....	60.00

URINAL COCK.

Fig. 197. (Not Illustrated.)

Size, inches.....	$\frac{1}{2}$
Price, Finished, per doz.....	36.00
Price, Nickel Plated, per doz.....	48.00
Price, Silver Plated, per doz.....	60.00

PANTRY COCK.

Fig. 198. (Not Illustrated.)

Price, Finished, per doz.....	54.00
Price, Nickel Plated, per doz.....	64.00
Price, Silver Plated, per doz.....	72.00

HOPPER COCK WITH PLATES AND HANDLES.

Fig. 199. (Not Illustrated.)

Size, inches.....	$\frac{3}{8}$
Price, per doz.....	60.00

LONG HOPPER COCK.

Fig. 200. (Not Illustrated.)

Size, inches.....	$\frac{3}{8}$
Price, per doz.....	30.00

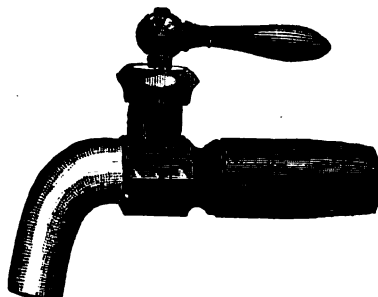
FULLER WORK.**FULLER PLAIN BIBB.**

Fig. 201.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$
Price, Finished, per doz.....	16.00	18.00	20.00	26.00	36.00	56.00
Price, Nickel Plated, per doz.....	20.00	22.00	24.00	32.00	46.00	70.00
Price, Silver Plated, per doz.....	28.00	34.00	40.00	50.00	64.00	85.00

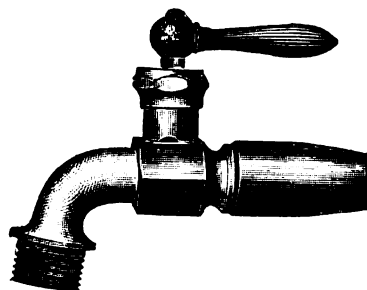
FULLER HOSE BIBB.

Fig. 202.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	21.00	24.00	30.00	38.00
Price, Nickel Plated, per doz.....	25.00	28.00	36.00	48.00
Price, Silver Plated, per doz.....	37.00	44.00	54.00	66.00

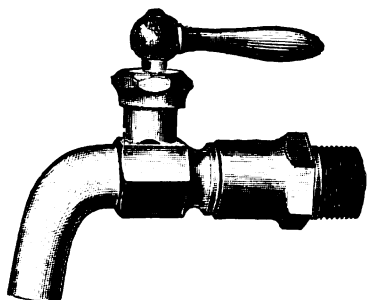
FULLER PLAIN BIBB FOR IRON PIPE.

Fig. 203.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	1
Price, Finished, per doz.....	21.00	24.00	30.00	40.00
Price, Nickel Plated, per doz.....	25.00	28.00	35.00	48.00
Price, Silver Plated, per doz.....	31.00	36.00	44.00	64.00

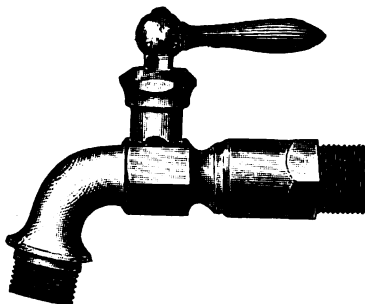
FULLER HOSE BIBB, FOR IRON PIPE.

Fig. 204.

Size, inches	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz	24.00	27.00	32.00	42.00
Price, Nickel Plated, per doz	28.00	31.00	37.00	50.00
Price, Silver Plated, per doz	34.00	39.00	46.00	66.00

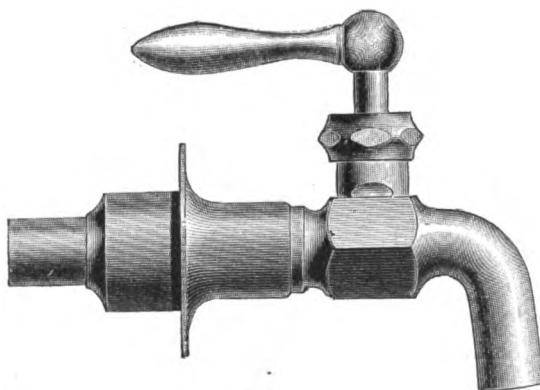
FULLER PLAIN BIBB, FLANGE AND THIMBLE.

Fig. 205.

Size, inches	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{4}$	1
Price, Finished, per doz	23.00	26.00	28.00	36.00	48.00
Price, Nickel Plated, per doz	28.00	32.00	34.00	42.00	58.00
Price, Silver Plated, per doz	36.00	42.00	46.00	56.00	75.00
Add if with Hose End, per doz		3.00	4.00	4.00	4.00

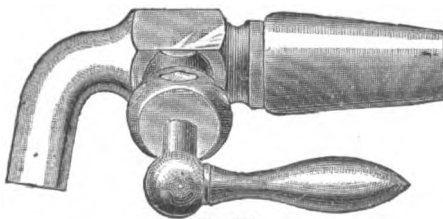
FULLER WASH-TRAY COCK.

Fig. 206.

Size, inches	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{3}{4}$	1
Price, Finished, per doz	20.00	22.50	30.00	40.00

FULLER BASIN COCKS.



Fig. 207. No. 1.

Price, Finished, per doz	33.00
Price, Nickel Plated, per doz.....	40.00
Price, Silver Plated, per doz.....	46.00

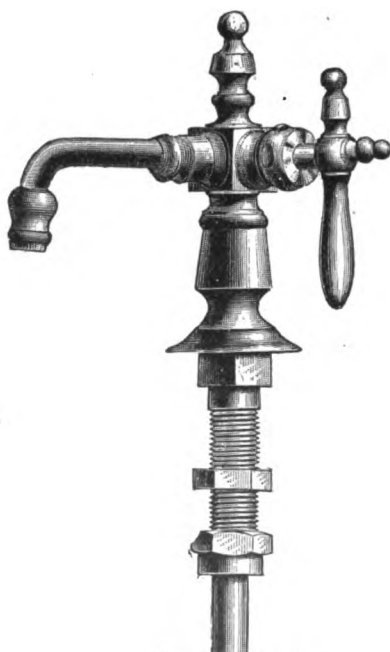


Fig. 208. No. 2.

Price, Brass, per doz.....	36.00
Price, Nickel Plated, per doz... ..	44.00
Price, Silver Plated, per doz.....	50.00

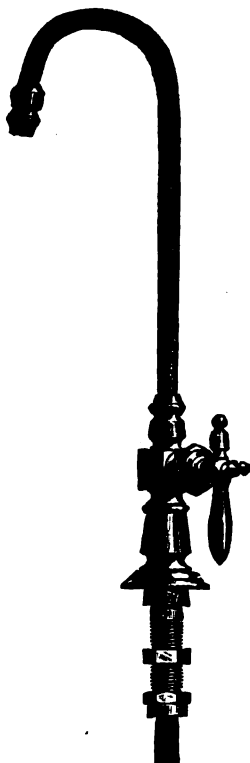
FULLER PANTRY COCK.

Fig. 209.

Number	1	2	3
Price, Finished, per doz.....	36.00	42.00	50.00
Price, Nickel Plated, per doz.....	42.00	50.00	60.00
Price, Silver Plated, per doz.....	50.00	60.00	70.00

FULLER WORK TRIMMINGS.**Eccentric.**

Fig. 210.

Size, inches.....	$\frac{1}{2}$ & $\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	3.00	4.00	6.00

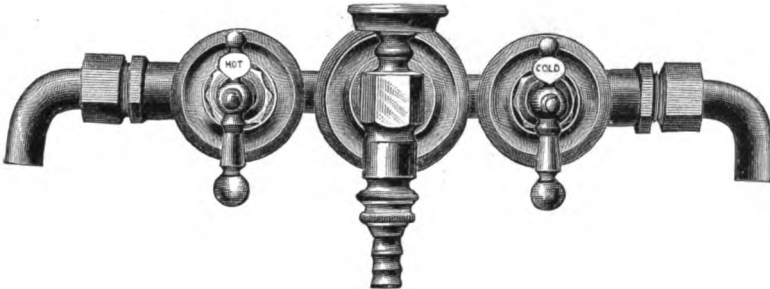
RUBBER BALL.

Fig. 211.

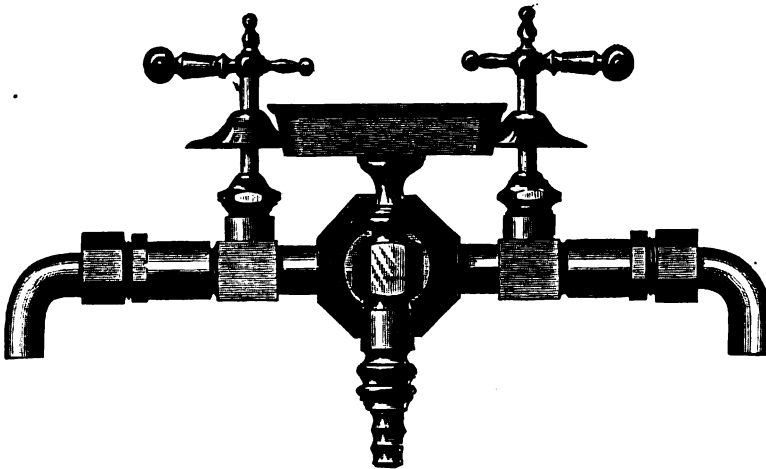
BALL STEM, WITH BALL.

Fig. 212.

Size, inches.....	$\frac{1}{2}$ & $\frac{3}{8}$	$\frac{3}{4}$	1	1 $\frac{1}{4}$	Size, inches.....	$\frac{1}{2}$ & $\frac{3}{8}$	$\frac{3}{4}$	1
Price, per doz.....	.75	1.00	1.25	2.00	Price, per doz.....	3.00	4.00	6.00

FULLER COMBINATION BATH COCK.**Complete, with Sprinkler.****Fig. 213.****No. 1.**

Price, Finished, each	10.50
Price, Nickel Plated, each	12.00
Price, Silver Plated, extra heavy, each.....	14.00

FULLER COMBINATION BATH COCK.**Complete, with Sprinkler.****Fig. 214.****No. 2.**

Price, Finished, each	13.00
Price, Nickel Plated, each.....	14.00
Price, Silver Plated, extra heavy, each.....	16.00

No. 2½, same style Handles in front, same price.

FULLER COMBINATION BATH COCK.

Complete, with Sprinkler.

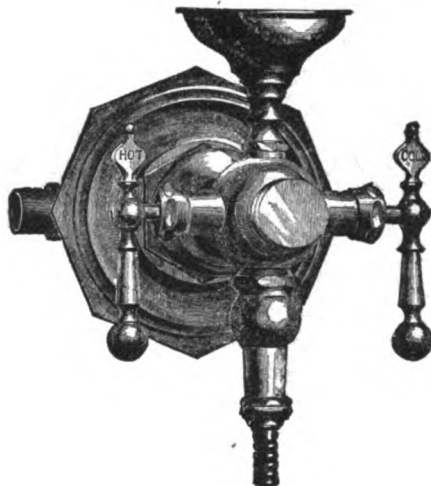


Fig. 215.

No. 3.

Price, Finished, each	14.00
Price, Nickel Plated, each	15.50
Price, Silver Plated, extra heavy, each	17.00
Extra for Ebony or Ivory Handles, add	3.00

FULLER COMBINATION BATH COCK.

Complete, with Sprinkler.

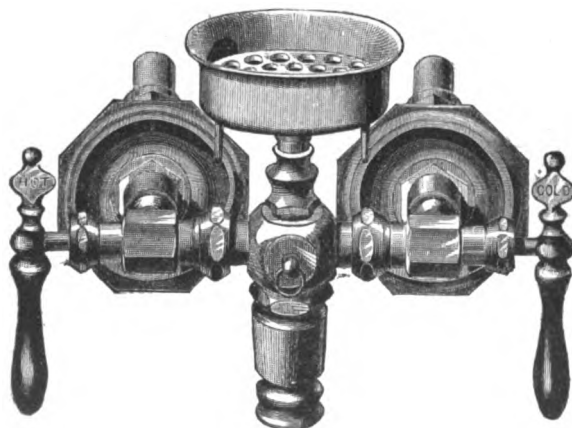


Fig. 216.

No. 4.

Price, Finished, each	18.00
Price, Nickel Plated, each	21.00
Price, Silver Plated, each	23.00

FULLER DOUBLE BASIN COCKS.

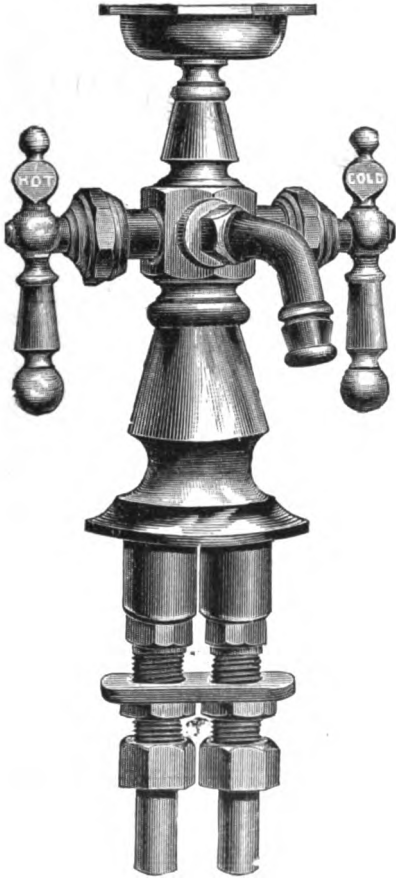


Fig. 217.

No. 8.

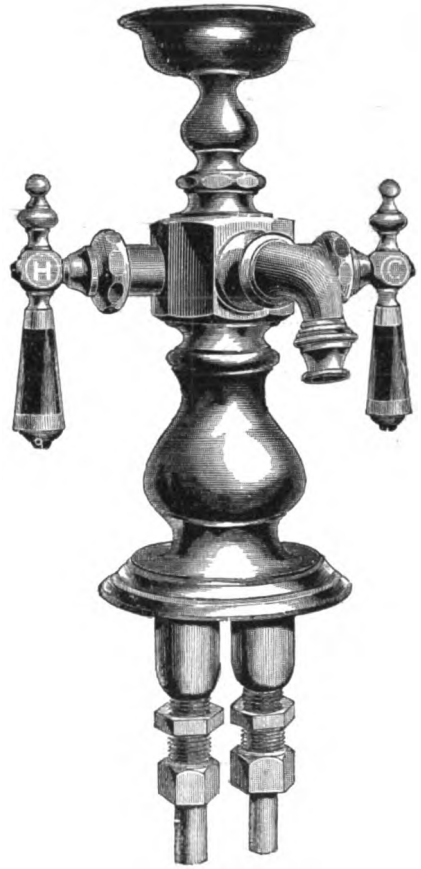


Fig. 218.

No. 9.

Number.....	S	9
Price, Finished, each	12.00	16.00
Price, Nickel Plated, each.....	13.00	18.00
Price, Silver Plated, each.....	15.00	20.00
With Ebony or Ivory Handles, add.	3.00	3.00

MISCELLANEOUS BRASS WORK.

HOSE NOZZLE, TO TIE ON.



Fig. 219.

Size, inches.....	$\frac{3}{4}$	1
Length, inches.....	$4\frac{1}{2}$	$4\frac{1}{2}$
Price, per doz....	3.50	4.00

HOSE PIPE, PLAIN SCREW TIP.



Fig. 220.

Size, inches.....	$\frac{3}{4}$	$\frac{3}{4}$	1	1	$1\frac{1}{4}$	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	2	2	$2\frac{1}{2}$	$2\frac{1}{2}$
Length, inches...	8	12	8	12	12	15	12	15	12	20	15	24
Price, per doz....	8.00	10.00	10.00	12.00	20.00	24.00	25.00	30.00	38.00	50.00	75.00	100.00

HOSE PIPE, SHORT, COCK LARGE END, CAST.

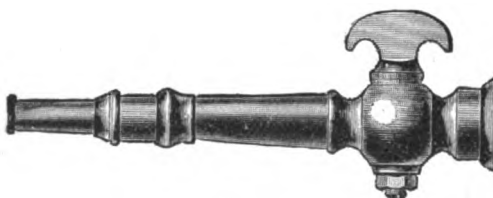


Fig. 221.

Size, inches.....	$\frac{3}{4}$	$\frac{3}{4}$	1	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Length, inches.....	8	12	8	12	20	20	20
Price, per doz.....	13.00	18.00	15.00	20.00	55.00	80.00	110.00

GEM SPRAY HOSE PIPE.

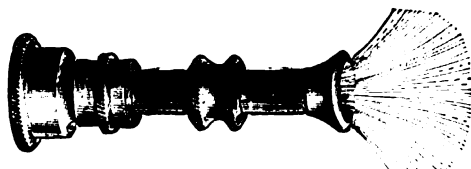


Fig. 222.



Fig. 223.

Size, inches.....	$\frac{3}{4}$
Price, per doz.....	9.00

CALDWELL HOSE BANDS



Fig. 224.

No. 2, $\frac{1}{2}$ inch, $3\frac{3}{4}$ inch long, per doz.....	.40	No. 8, $\frac{3}{4}$ inch, $4\frac{1}{4}$ inch long, per doz.....	.60
No. 4, $\frac{1}{2}$ " $3\frac{3}{4}$ " " .....	.40	No. 10, 1 " 5 " " .....	.80
No. 6, $\frac{3}{4}$ " $4\frac{1}{8}$ " "60	No. 12, 1 " $5\frac{3}{8}$ " "80

HOSE STRAP FASTENERS.

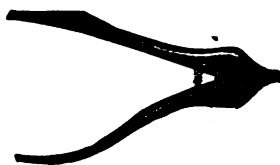


Fig. 225.

$\frac{1}{2}$ to 1 inch.....	.50	$\frac{1}{4}$ to 2½ inch.....	.75
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HOSE SPLICE.

For Mending Hose.



Fig. 226.

Size, inches.....	½	¾	1
Price, Coppered, per doz.....	.40	.50	1.00

DAISY LAWN SPRINKLER.



Fig. 227.

Size, inches.....	$\frac{3}{4}$
Price, Fig. 227, per doz.....	9.00

LAWN SPRINKLERS.

Fig. 228.

Price, each, Four Arm, Nickel Plated Head.....	6.50
Price, each, Eight 'Arm, Nickel Plated Head.....	7.50
With Basket and Ball Top, add.....	6.50

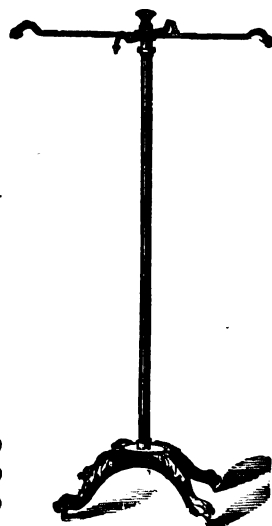


Fig. 228.

HOSE SPRINKLERS.

Fig. 229.

Diameter, inches.....	1½	2
Price, per doz., for ¾ and 1 inch Pipes.....	3.50	4.50

SHAMPOOING SPRINKLERS.

Fig. 230.

Price, Finished, per doz.....	8.00
Price, Nickel Plated, per doz.....	10.00
Price, Silver Plated, per doz.....	12.00

HOSE COUPLINGS.

Fig. 231.

Size, inches.....	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
Price, per doz.....	2.40	2.40	4.40	10.00	14.00	24.00	48.00	76.00	.....	.....	.....	.....
Price, for Iron Pipe, per doz	2.65	2.65	4.65	10.50	15.00	26.00	50.00	79.00	120.00	150.00	250.00	450.00

For either part of Coupling two-thirds list price.

HOSE CLAMPS.

Fig. 232.

Size, inches.....	½	¾	1	1¼	1½	2	2½	3
Price, per doz.....	1.50	1.50	2.00	2.50	3.00	4.00	7.00	10.00

HOSE NIPPLES.



Fig. 234.



Fig. 235.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
Price, Fig. 234, per doz.....	3.50	3.50	5.00	9.00	10.00	14.00	28.00	40.00	50.00	75.00
Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
Price, Fig. 235, per doz.....	3.50	3.50	5.00	9.00	10.00	14.00	28.00	40.00	50.00	75.00

HOSE BIBB END.

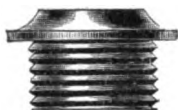


Fig. 236.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$
Price, per doz.....	2.50	3.50	6.00	8.00	15.00	24.00

PLAIN COUPLING.



Fig. 237.

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
Price, Finished, per doz.....	4.00	4.50	5.00	6.50	8.00	12.00	18.00	24.00

BOILER COUPLINGS, FOR IRON BOILER.

Straight.



Fig. 238.

Bent.

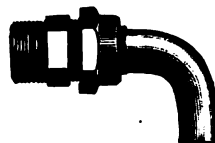
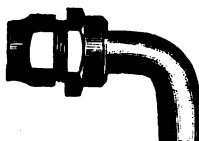


Fig. 239.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Plain, Fig. 238, per doz.....	7.50	8.00	11.00
Price, Ground Face, Fig. 238, per doz.....	8.50	9.00	12.50
Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Plain Face, Fig. 239, per doz.....	8.50	9.00	12.00
Price, Ground Face, Fig. 239, per doz.....	9.50	10.00	13.50
Price of one Straight and three Bent, Plain Face, per set.....	2.50		
Price of one Straight and three Bent, Ground Face, per set.....	2.75		

WATER BACK COUPLINGS.**Straight.****Fig. 240.****Bent.****Fig. 241.**

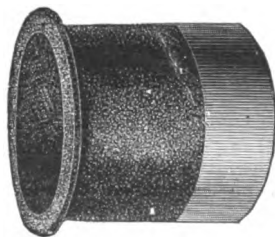
Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Plain, Fig 240, per doz	6.50	7.00	10.00
Price, Ground Face, Fig. 240, per doz.....	7.50	8.00	11.00
Price, Plain, Fig. 241, per doz.....	7.50	8.00	11.00
Price, Ground Face, Fig. 241, per doz.....	8.50	9.00	12.50

SOLDERING NIPPLE.**Fig. 242.**

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, per doz.....	1.75	2.25	2.50	3.00	5.00	7.50	10.00	14.00	20.00	28.00

SOLDERING UNION.**Fig. 243.**

Size, inches.....	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$
Price, per doz.....	2.25	2.75	3.25	4.00	6.00	8.50	12.00

END FERRULE, FOR IRON PIPE.**Fig. 244.**

Size, inches.....	2	3	4
Price, per doz.....	5.00	9.00	11.00

END FERRULE, FOR IRON PIPE.

With Trap Screw.

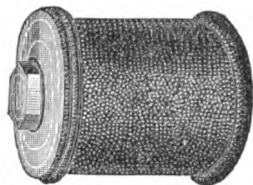


Fig. 245.

Size, inches.....	2	3	4	5	6
Price, per doz.....	10.00	20.00	30.00	54.00	72.00

STREET WASHER SCREWS.

Fig. 246.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, per doz.....	5.50	6.00	8.50

For Iron Pipe.



Fig. 247.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, per doz.....	6.00	7.00	9.00

TRAP SCREW.

Fig. 248.

Size, inches.....	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4
Price, Finished, per doz.....	2.50	3.00	3.50	4.50	8.00	12.00	18.00	26.00	30.00

STRAINER.

Fancy.



Fig. 249.

Size, inches.....	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6
Price, Finished, per doz.....	1.20	1.45	1.80	2.40	3.00	3.60	4.80	9.00	12.00

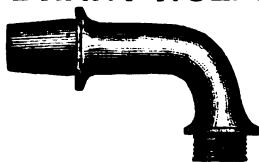
HYDRANT NOZZLE.

Fig. 250.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Fig. 250, per doz.....	7.00	8.50	10.00

HYDRANT NOZZLE FOR IRON PIPE.

Fig. 251.

Size, inches.....	$\frac{1}{2}$	$\frac{3}{4}$	1
Price, Fig. 251, per doz.....	8.00	9.50	11.00

HYDRANT HANDLES AND GUIDES.**Triangular Guide.**

Fig. 252.



Fig. 253.

Price, Fig. 252, per doz.....	8.00	Price, Fig. 253, per doz.....	7.00
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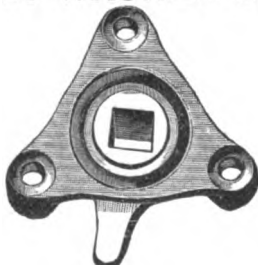
STREET WASHER CHECK.

Fig. 254.

Price, Brass, per doz.....	3.00	Price, for Iron Street Washer, each.....	
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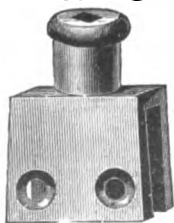
HYDRANT CLAMP.

Fig. 255.

STREET WASHER KEY.

Fig. 256.

Price, for $\frac{1}{2}$ and $\frac{3}{4}$ inch Cocks, per doz.....	2.50	Price Malleable Iron, per lb.....	.15
Price, for $\frac{3}{4}$ and 1 inch Cocks, per doz.....	3.50		
Price, Malleable Iron, per lb.....	.15		

POWELL'S PATENT STAR PLUGS.

With Rubber Stoppers.

BASIN PLUG, COMMON OVER-FLOW.

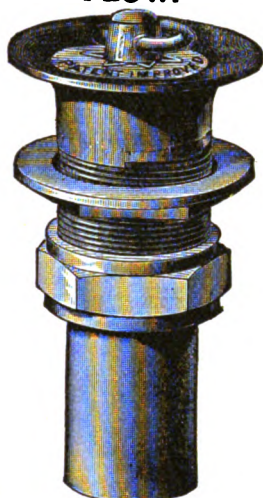


Fig. 257.

Size, inches.....	1	1 1/4
Price, Brass, per doz.....	4.50	7.50
Price, Plated, per doz.....	5.50	9.00

SINK OR BATH PLUG.



Fig. 259.

Size, inches.....	1	1 1/4	1 1/2	2
Price, Brass, per doz.....	2.00	2.25	3.50	5.00
Price, Plated, per doz.....	2.50	2.75	4.00	6.00

BASIN PLUG, PATENT OVER-FLOW.

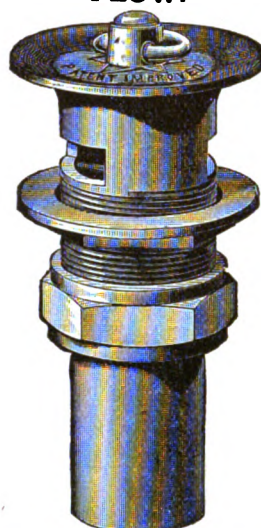


Fig. 258.

Size, inches.....	1	1 1/4
Price, Brass, per doz.....	5.00	9.00
Price, Plated, Per doz.....	6.00	10.50

WASH TRAY PLUG.



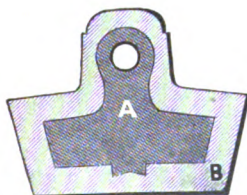
Fig. 260.

Size, inches.....	1	1 1/4	1 1/2	2
Price, Brass, per doz.....	2.50	3.25	4.00	6.00
Price, Plated, per doz.....	3.50	4.25	5.00	7.50

POWELL'S PATENT STAR STOPPERS.

Showing Metal Core.—Fig. 261.

Rubber.—Fig. 262.



For Wash Bowls, per doz.....	1.00		
Size, inches.....	1 1/4	1 1/2	2
Price, for Wash Trays and Bath Tubs, with Plated Tips and Rings, per doz	1.25	1.75	2.50

BASIN PLUG.

Common Overflow.



Fig. 263.

Price, Finished, per doz.....	8.00
Price, Nickel Plated, per doz.....	8.50
Price, Silver Plated, per doz.....	10.00

BASIN PLUG.

Patent Overflow.



Fig. 264.

Price, Finished, per doz.....	9.00
Price, Nickel Plated, per doz.....	9.50
Price, Silver Plated, per doz.....	11.00

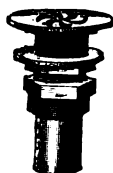
BASIN GRATE.

Fig. 265.

Price, Finished, per doz.....	12.00
Price, Nickel Plated, per doz.....	13.00
Price, Silver Plated, per doz.....	15.00

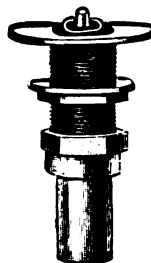
SOAPSTONE OR WOOD**SINK PLUG.**

Fig. 266.

Size, inches.....	1	1¼	1½	2
Price, Finished.....per doz	15.00	16.00	26.00	40.00
Price, Nickel Plated, “	17.00	19.00	29.00	44.00
Price, Silver Plated, “	21.00	23.00	33.00	48.00

SINK OR BATH PLUG.

Fig. 267.

Size, inches.....	1	1¼	1½	1¾	2	2¼	2½	3½	4
Price, Finished, per doz.....	2.50	3.00	4.00	5.50	7.00	10.00	15.00	18.00	36.00
Price, Nickel Plated, per doz.....	3.00	3.50	4.50	6.50	8.00	12.00	17.00	21.00	40.00

WASH TRAY PLUG.

Fig. 268.

Size, inches.....	1	1¼	1½	1¾	2	2½	3	4
Price, Finished, per doz.....	3.75	6.00	7.00	9.00	10.00	17.00	22.00	44.00

CHAIN STAYS.

For Wood.



Fig. 269.

With Square Base to fit
Basin Cock Hole.

Fig. 270.



Fig. 271.

Price, Finished, per doz.....	2.00	Price, Finished, per doz.....	3.00	Price, Finished, per doz.....	3.50
Price, Nickel Pl'd, per doz...	2.50	Price, Nickel Pl'd, per doz...	3.75	Price, Nickel Pl'd, per doz...	4.25
Price, Silver Pl'd, per doz...	3.00	Price, Silver Pl'd, per doz....	4.50	Price, Silver Pl'd, per doz....	5.00

With Ring Cup.



Fig. 272.



Fig. 273.



Fig. 274.

Price, Finished, per doz.....	5.50	Price, Finished, per doz.....	7.00	Price, Finished, per doz.....	8.00
Price, Nickel Pl'd, per doz...	6.50	Price, Nickel Pl'd, per doz..	8.00	Price, Nickel Pl'd, per doz..	9.00
Price, Silver Pl'd, per doz..	7.50	Price, Silver Pl'd, per doz...	10.00	Price, Silver Pl'd, per doz...	11.00

With Ring Cup.



Fig. 275.

Soap Cup.



Fig. 276.

To Cover Basin Cock Hole.

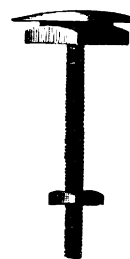


Fig. 277.

Price, Finished, per doz.....	10.00	Price, Finished, per doz.....	30.00	Price, Finished, per doz.....	3.50
Price, Nickel Pl'd, per doz...	12.00	Price, Nickel Pl'd, per doz..	32.00	Price, Nickel Pl'd, per doz...	4.50
Price, Silver Pl'd, per doz...	14.00	Price, Silver Pl'd, per doz...	34.00		

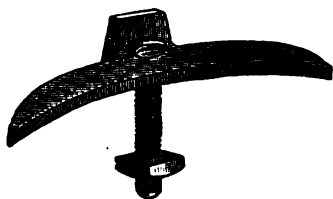
BASIN CLAMPS.

Fig. 278.



Fig. 279.

Figures.....	278	279
Price, per doz.....	1.50	1.25

PLATED SCREWS FOR SLABS. VACUUM VALVES.

Fig. 280.



Fig. 281.

Price, Silver Plated, per doz.....	1.25	Price, per doz.....	12.00
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TACK MOULDS.

Plain Pattern.

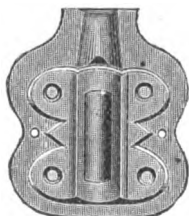


Fig. 282.

Star Pattern.

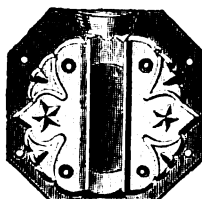


Fig. 283.

Price, Single, each.....	2.50	Price, Single, each....	3.00
Price, Double, each.....	3.50	Price, Double, each.....	4.00

FOLEY'S WASTE VALVE, FLANGE AND HANDLE.

Fig. 284.

Price, Basin Waste, Nickel Plated each.....	6.67
Price, Basin Waste, Silver Plated, each.....	8.00
Price, Bath Waste, Nickel Plated, each.....	8.00
Price, Bath Waste, Silver Plated, each.....	9.00

PLUMBERS CHAIN.

SAFETY.

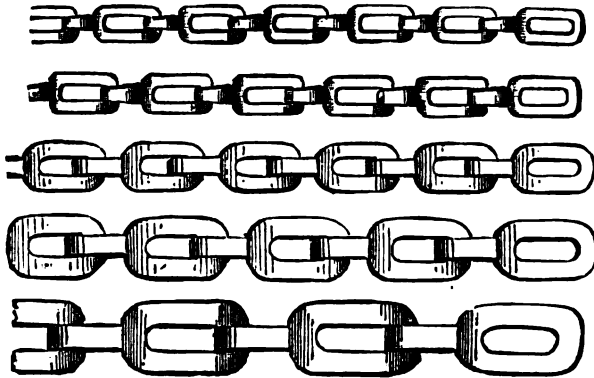


Fig. 285.

Price Per Package.		Wire Gauge.
Brass.	Plated.	
2.25	3.00	No. 00
2.50	3.25	No. 0
3.12	4.08	No. 1
4.68	5.75	No. 2
6.36	8.00	No. 3

BATH, BASIN AND WASH TRAY CHAINS AND SNAPS.

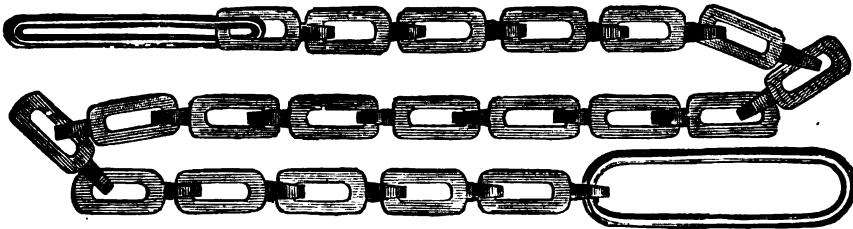


Fig. 286.

	Brass.	Plated.
Price, for Basins, per doz.....	1.00	1.35
Price, for Bath and Wash Trays, per doz.....	1.35	2.00

Basin Chains 16 inches long. Bath and Tray Chains 27 inches long.

RAYMOND'S PATENT COMBINATION FERRULE.



Fig. 287.

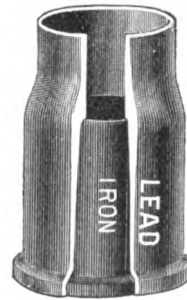


Fig. 288.

REGULAR SIZES.

4 Inches Long.

1 1/2 x 2 inch.....	23 cents.
2 "	18 "
3 "	25 "
4 "	35 "

EXTRA LONG SIZES.

	6 inch Long.	8 inch Long.	10 inch Long.	12 inch Long.
1 1/2 x 2 inch.....	.35	.45	.50	.55
2 " .....	.30	.40	.45	.50
3 " .....	.40	.55	.70	.75
4 " .....	.55	.70	.85	.90

CAST IRON SOIL PIPE AND FITTINGS.

SINGLE HUB PIPE.



Fig. 289.

Price, 2 inch, 5 feet long, per foot.....	.24
“ 3 “ “ “ .....	.30
“ 4 “ “ “ .....	.36
“ 5 “ “ “ .....	.50
“ 6 “ “ “ .....	.60
“ 8 “ “ “	1.25
“ 10 “ “ “	2.00
“ 12 “ “ “	3.00
“ 2 inch, Extra Heavy, 5 feet long, per foot.....	.35
“ 3 “ “ “ “ “ .....	.55
“ 4 “ “ “ “ “ .....	.75
“ 5 “ “ “ “ “	1.00
“ 6 “ “ “ “ “	1.20
“ 8 “ “ “ “ “	2.25
“ 10 “ “ “ “ “	3.00
“ 12 “ “ “ “ “	4.00

DOUBLE HUB PIPE.



Fig. 290.

	Standard.	Ex. Heavy.
Price, 2 inch, 5 feet long, each.....	1.50	2.05
“ 3 “ “ “	1.80	3.05
“ 4 “ “ “	2.10	4.05
“ 5 “ “ “	2.80	5.30
“ 6 “ “ “	3.30	6.30

SOIL PIPE FITTINGS. QUARTER BEND.



Fig. 291.

	Standard.	Ex. Heavy.
Price, 2 inch, each .....	.40	.50
" 3 " " .....	.55	.70
" 4 " " .....	.65	1.10
" 5 " "	1.00	1.35
" 6 " "	1.20	1.75
" 8 " "	3.00	4.00
" 10 " "	4.00	5.00

QUARTER BEND. Double Hub.



Fig. 292.

	Standard.	Ex. Heavy.
Price, 2 inch, each .....	.70	.80
" 3 " " .....	.85	1.00
" 4 " " .....	.95	1.40
" 5 " "	1.30	1.65
" 6 " "	1.50	2.05

QUARTER BEND. With Two-inch Outlet on Side.



Fig. 293.

	Standard.	Ex. Heavy.
Price, 2 inch, with 2 inch Outlet, each .....	.70	.80
" 3 " " 2 " " " .....	.85	1.00
" 4 " " 2 " " " .....	.95	1.40
" 4 " " 3 " " "	1.05	1.50
" 5 " " 2 " " "	1.30	1.65
" 5 " " 3 " " "	1.40	1.75
" 6 " " 2 " " "	1.50	2.05
" 6 " " 3 " " "	1.60	2.15
" 6 " " 4 " " "	1.70	2.25
" 8 " " 4 " " "	3.50	4.50
" 10 " " 4 " " "	4.50	5.50

QUARTER BEND. With Heel Outlet.

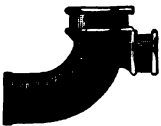


Fig. 294.

	Standard.	Ex. Heavy.
Price, 2 inch, with 2 inch Outlet, each .....	.70	.80
" 3 " " 2 " " " .....	.85	1.00
" 4 " " 2 " " " .....	.95	1.40
" 4 " " 3 " " "	1.05	1.50
" 5 " " 2 " " "	1.30	1.65
" 5 " " 3 " " "	1.40	1.75
" 6 " " 2 " " "	1.50	2.05
" 6 " " 3 " " "	1.60	2.15
" 6 " " 4 " " "	1.70	2.25
" 8 " " 4 " " "	3.50	4.50
" 10 " " 4 " " "	4.50	5.50

SIXTH BEND.



Fig. 295.

	Standard.	Ex. Heavy.
Price, 2 inch, each .....	.40	.50
" 3 " " .....	.55	.70
" 4 " " .....	.65	1.10
" 5 " "	1.00	1.35
" 6 " "	1.20	1.75
" 8 " "	3.00	4.00

EIGHTH BEND.



Fig. 296.

Price, 2 inch, each.....	Standard.	Ex. Heavy.
" 3 " " .....	.35	.45
" 4 " " .....	.45	.65
" 5 " " .....	.65	1.00
" 6 " " .....	.90	1.20
" 8 " "	1.05	1.40
" 10 " "	2.75	3.75
" 10 " "	3.75	5.00

LONG QUARTER BEND.



Fig. 297.

Price, 4 inch, 18 inches long in the clear.....	Standard.	Ex. Heavy.
" 5 " " " "	1.50	2.25
" 6 " " " "	2.25	2.75
" 6 " " " "	2.50	3.25

T BRANCH.



Fig. 298.

	Standard.	Ex. Heavy.		Standard.	Ex. Heavy.
2 x 2 .....	.40	.60	6 x 6		
3 x 3 } .....	.55	.80	6 x 5		
3 x 2 }			6 x 4	1.40	2.00
4 x 4 }			6 x 3		
4 x 3 } .....	.75	1.20	6 x 2		
4 x 2 }			8 x 8		
5 x 5 }			to	3.25	5.50
5 x 4 }	1.20	1.50	8 x 2		
5 x 3 }			10 x 10		
5 x 2 }			to	6.50	9.00
			10 x 2		

SANITARY T BRANCH.



Fig. 299.

Price, 2 x 2 inch, each.....	Standard.	Ex. Heavy.
" 3 x 3 " " .....	.60	.80
" 4 x 4 " " .....	.80	1.25
" 4 x 4 " "	1.20	1.60
" 5 x 5 " "	1.60	2.25

T BRANCH, WITH SIDE OUTLET.



Fig. 300.

Price, 4 x 4 inches, with 2 inch outlet, each.....	Standard.	Ex. Heavy.
" 4 x 3 " " 2 " " "	1.25	1.80
" 4 x 2 " " 2 " " "		
" 5 x 5 " " 2 " " "		
" 5 x 4 " " 2 " " "	1.80	2.10
" 5 x 3 " " 2 " " "		
" 5 x 2 " " 2 " " "		
" 6 x 6 " " 2 " " "		
" 6 x 5 " " 2 " " "		
" 6 x 4 " " 2 " " "	2.00	2.50
" 6 x 3 " " 2 " " "		
" 6 x 2 " " 2 " " "		

LONG T BRANCH.



Fig. 301.

	Standard.	Ex. Heavy.
Price, 4 x 4, 24 inch in the clear, each.....	2.00	3.00
" 4 x 4, 30 " " " "	2.50	3.75
" 4 x 4, 36 " " " "	3.00	4.25
" 5 x 4, 24 " " " "	2.75	4.00
" 5 x 4, 30 " " " "	3.50	5.00
" 5 x 4, 36 " " " "	4.25	6.25
" 6 x 4, 24 " " " "	3.50	5.00
" 6 x 4, 30 " " " "	4.50	6.50
" 6 x 4, 36 " " " "	5.50	8.00

CROSSHEAD BRANCH.



Fig. 302.

	Standard.	Ex. Heavy.		Standard.	Ex. Heavy.
2 x 2 .....	.80	1.00	6 x 6		
3 x 3			6 x 5		
3 x 2 }	1.10	1.40	6 x 4	2.50	3.30
4 x 4 }			6 x 3		
4 x 3 }	1.25	1.75	6 x 2		
4 x 2 }			8 x 8	5.00	7.00
5 x 5 }			to		
5 x 4 }	1.60	2.10	8 x 2		
5 x 3			10 x 10	8.00	11.00
5 x 2					

Y BRANCH.



Fig. 303.

	Standard.	Ex. Heavy.		Standard.	Ex. Heavy.
2 x 260	.80	6 x 3	2.00	3.25
3 x 3 } .....	.80	1.25	6 x 2	
3 x 2 }			8 x 8		
4 x 4 }			to	5.00	8.00
4 x 3 }	1.20	1.60	8 x 2		
4 x 2 }			10 x 10		
5 x 5 }			10 x 8	7.00	11.00
5 x 4 }	1.60	2.25	10 x 6		
5 x 3 }			10 x 5		
5 x 2 }			10 x 4		
6 x 6 }	2.00	3.25	10 x 3		
6 x 5 }			10 x 2		
6 x 4 }					

DOUBLE Y BRANCH.



Fig. 304.

	Standard.	Ex. Heavy.		Standard.	Ex. Heavy.
2 x 2	1.00	1.25	6 x 4	3.00	4.00
3 x 3 }	1.25	1.60	6 x 3		
3 x 2 }			6 x 2		
4 x 4 }			8 x 8	6.00	9.00
4 x 3 }	1.65	2.00	8 x 6		
4 x 2 }			8 x 5		
5 x 5 }			8 x 4		
5 x 4 }	2.25	3.00	8 x 3		
5 x 3 }			8 x 2	9.00	14.00
5 x 2 }			10 x 10		
6 x 6 }	3.00	4.00	to		
6 x 5 }			10 x 2		

HALF Y BRANCH.

Fig. 305.

	Standard.	Ex. Heavy.		Standard.	Ex. Heavy.
2 x 260	.80	6 x 6	2.00	3.25
3 x 3 } .....	.80	1.25	6 x 5	
3 x 2 }			6 x 4		
4 x 4 }	1.20	1.60	6 x 3		
4 x 3 }			6 x 2	5.00	8.00
4 x 2 }	1.60	2.25	8 x 8		
5 x 5 }			8 x 6		
5 x 4 }			8 x 5		
5 x 3 }			8 x 4		
5 x 2 }			8 x 2		

DOUBLE HALF Y BRANCH.

Fig. 306.

	Standard.	Ex. Heavy.		Standard.	Ex. Heavy.
2 x 2	1.00	1.25	6 x 6	3.00	4.00
3 x 3 }	1.25	1.60	6 x 5		
3 x 2 }			6 x 4		
4 x 4 }	1.65	2.00	6 x 3		
4 x 3 }			6 x 2	6.00	9.00
4 x 2 }	2.25	3.00	8 x 8		
5 x 5 }			8 x 6		
5 x 4 }			8 x 5		
5 x 3 }			8 x 4		
5 x 2 }			8 x 2		

OFFSET.

Fig. 307.

Price, 2 inch to offset 4 inch, each.....	Standard.	Ex. Heavy.
" 2 " " 6 " " .....	.50	.90
" 2 " " 8 " " .....	.60	1.00
" 2 " " 10 " " .....	.70	1.10
" 2 " " 12 " " .....	.80	1.20
" 2 " " 12 " " .....	.85	1.25
" 3 " " 4 " " .....	.75	1.10
" 3 " " 6 " " .....	.90	1.20
" 3 " " 8 " " .....	.90	1.35
" 3 " " 12 " "	1.00	1.45
" 4 " " 4 " " .....	.85	1.25
" 4 " " 6 " "	1.00	1.40
" 4 " " 8 " "	1.15	1.50
" 4 " " 10 " "	1.25	1.60
" 4 " " 12 " "	1.40	1.80
" 4 " " 14 " "	1.65	2.00
" 4 " " 16 " "	1.80	2.25
" 4 " " 20 " "	2.25	3.00
" 5 " " 4 " "	1.40	1.80
" 5 " " 6 " "	1.60	2.00
" 5 " " 8 " "	1.80	2.25
" 5 " " 12 " "	2.00	2.50
" 5 " " 16 " "	2.40	3.00
" 6 " " 4 " "	2.00	3.00
" 6 " " 6 " "	2.25	3.25
" 6 " " 8 " "	2.40	3.50
" 6 " " 12 " "	2.75	4.00

OFFSET.

Fig. 308.

Price, 4 inch to offset 4 inch, each.....	Standard.	Ex. Heavy.
" 4 " " 6 " "	1.15	1.55
" 4 " " 8 " "	1.30	1.70
" 4 " " 10 " "	1.45	1.80
" 4 " " 12 " "	1.55	1.90
" 4 " " 14 " "	1.70	2.10
" 4 " " 16 " "	1.95	2.30
" 4 " " 20 " "	2.10	2.55
" 4 " " 20 " "	2.55	3.30

SINGLE HUB.

Fig. 309.

	Standard.	Ex. Heavy.
Price, 2 inch, each .....	.25	.35
" 3 " " .....	.35	.40
" 4 " " .....	.40	.50
" 5 " " .....	.60	.75
" 6 " " .....	.75	1.00
" 8 " "	1.40	3.00
" 10 " "	2.50	4.00

DOUBLE HUB.

Fig. 310.

	Standard.	Ex. Heavy.
Price, 2 inch, each .....	.30	.40
" 3 " " .....	.45	.55
" 4 " " .....	.65	.75
" 5 " " .....	.75	.90
" 6 " " .....	.80	1.25
" 8 " "	1.50	3.25
" 10 " "	2.50	4.00

REDUCER.

Fig. 311.

	Standard.	Ex. Heavy.
Price, 4 inch to 2 inch, each .....	.50	.60
" 5 " " 2 " " " .....	.70	.80
" 5 " " 3 " " "		
" 5 " " 4 " " "		
" 6 " " 2 " " " .....	.80	.90
" 6 " " 3 " " "		
" 6 " " 4 " " "		
" 8 " " 3 " " "	1.60	2.20
" 8 " " 4 " " "		
" 8 " " 5 " " "		
" 8 " " 6 " " "		

THIMBLE.

To Connect Lead Pipe to Iron Soil Pipe.



Fig. 312.

Price, 2 inch, each	15
" 3 " "	25
" 4 " "	30

STRAIGHT SLEEVE.

Fig. 313.

	Standard.	Ex. Heavy.
Price, 2 inch, each .....	.30	.40
" 3 " " .....	.45	.55
" 4 " " .....	.65	.75
" 5 " " .....	.75	.90
" 6 " " .....	.80	1.15
" 8 " "	1.50	3.50

SOIL PIPE HOOK.



Fig. 314.

Price, 2 inch, each	
" 3 " "	.08
" 4 " "	.10
" 5 " "	.12
" 6 " "	.15
" 8 " "	.20
" 8 " "	.40

VENTILATING CAPS.



Fig. 315.

Price, 2 inch, each	
" 3 " "	.40
" 4 " "	.60
" 4 " " 8 inches long	.80
" 4 " " 18 " "	1.00
" 5 " "	1.10
" 6 " "	1.50

S TRAP.



Fig. 316.

	Standard.	Ex. Heavy.
Price, 2 inch, each	.80	1.25
" 3 " "	1.25	2.00
" 4 " "	1.75	2.75
" 5 " "	3.00	4.00
" 6 " "	4.00	5.50

S TRAP.

With Heel Outlet.



Fig. 317.

	Standard.	Ex. Heavy.
Price, 4 inch, S Trap, each	2.25	3.25
" 4 " 3/4 S Trap, "	2.25	3.25
" 4 " 3/4 S Trap, "	2.25	3.25

THREE-QUARTER S TRAP.



Fig. 318.

	Standard.	Ex. Heavy.
Price, 2 inch, each	.80	1.25
" 3 " "	1.25	2.00
" 4 " "	1.75	2.75
" 5 " "	3.00	4.00
" 6 " "	4.00	5.50

HALF S TRAP.

Fig. 319.

	Standard.	Ex. Heavy.
Price, 2 inch, each.....	.80	1.25
" 3 " ".....	1.25	2.00
" 4 " ".....	1.75	2.75
" 5 " ".....	3.00	4.00
" 6 " ".....	4.00	5.50

HALF S TRAP.

With Side Outlet.



Fig. 320.

	Standard.	Ex. Heavy.
Price, 4 inch $\frac{1}{2}$ S Trap, each.....	2.25	3.25
" 4 " $\frac{3}{4}$ S " ".....	2.25	3.25
" 4 " S " ".....	2.25	3.25

RUNNING TRAP.

Fig. 321.

	Standard.	Ex. Heavy.
Price, 2 inch, each.....	.80	1.25
" 3 " ".....	1.25	2.00
" 4 " ".....	1.75	2.75
" 5 " ".....	3.00	4.00
" 6 " ".....	4.00	5.50

RUNNING TRAPS.

With Hub for Vent.

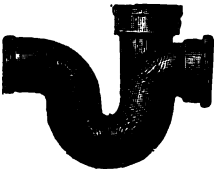


Fig. 322.

	Standard.	Ex. Heavy.
Price, 4 inch, with 4 inch vent.....	1.75	2.75
" 5 " " 4 " ".....	3.00	4.00
" 6 " " 4 " ".....	4.00	5.50
" 8 " " 6 " ".....	9.00	12.00
" 10 " " 6 " ".....		

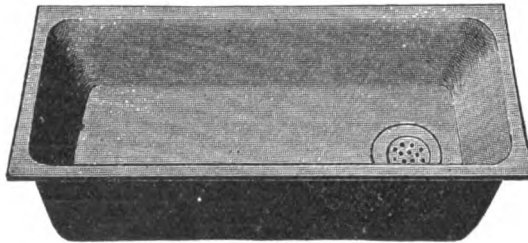
WROUGHT STEEL SINK.

Fig. 323.

PAINTED.		GALVANIZED.	
16 x 24 x 6, each.....	1.80	16 x 24 x 6, each.....	4.00
18 x 30 x 6, ".....	2.50	18 x 30 x 6, ".....	5.10
18 x 36 x 6, ".....	3.00	18 x 36 x 6, ".....	6.50
20 x 30 x 6, ".....	3.00	20 x 30 x 6, ".....	6.25
20 x 36 x 6, ".....	3.70	20 x 36 x 6, ".....	7.75
20 x 40 x 6, ".....	4.00	20 x 40 x 6, ".....	8.50

These Sinks are made from one plate of steel, and are superior to cast iron sinks in every particular, being lighter, stronger, and more durable.

It is well known that cast iron sinks break easily in shipping, storing, placing in position for use, and from various other causes, adding largely to average cost to plumbers and dealers, and annoyance and loss to users.

These Sinks being of wrought steel, will not break from heat, cold, or any cause whatever. Steel being less porous than cast iron, they are comparatively odorless, and their greater elasticity avoids the breakage of dishes.

CAST IRON SQUARE SINKS.

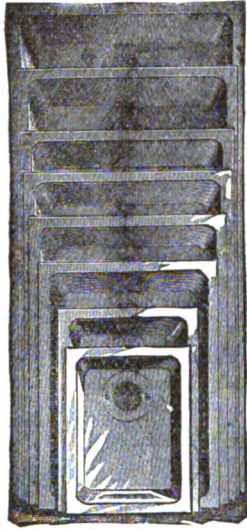


Fig. 324.

Size, inches.	Depth, inches.	Plain.
13 x 19	5	1.75
14 x 20	6	2.20
15 x 23	6	2.40
15 x 25	6	2.75
15 x 27	6	2.90
16 x 24	6	2.70
16 x 28	6	3.20
16 x 30	6	3.50
18 x 24	6	2.80
18 x 30	6	3.75
18 x 32	6	4.25
18 x 36	6	4.75
18 x 42	6	6.25
19 x 38	6	5.60
20 x 24	6	3.50
20 x 30	6	4.00
20 x 36	6	5.25
20 x 40	6	6.00
20 x 42	6	6.50
22 x 42	6	6.75
24 x 48	6	8.00
22 x 62	6	
22 x 76	6	

Add to List, if with Patent Overflow, Plain, 1.00.

Add, if with Plug Strainer, Plain, 20c.

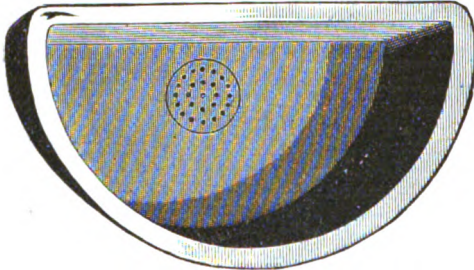


Fig. 325.

HALF-CIRCLE SINK.

Number.	Back.	Width.	Depth.	Price, Plain.
1.....	24 in.	14 in.	6 in.	2.50
2.....	27 "	14 "	6 "	3.75



Fig. 326.

CORNER SINK.

Number.	Side.	Front.	Depth.	Price, Plain.
1.....	17 in.	25 in.	6 in.	2.00
2.....	20 "	28 "	6 "	2.50
3.....	22 "	31 "	6 1/2 "	3.75

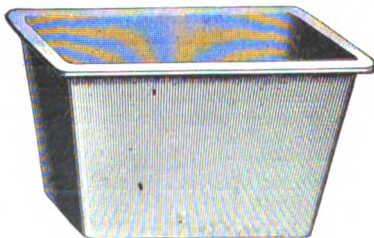


Fig. 327.

SQUARE SLOP SINK.

Size, inches.....	16 x 16	20 x 14	24 x 20
Depth, inches.....	10	12	12
Price, Plain, each.....	4.00	5.00	6.00

Furnished with Patent Overflow or Plug Strainer same extra price as Square Sinks.

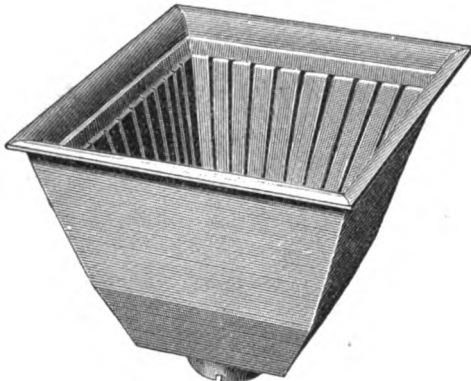


Fig. 328.

SLOP HOPPER.

With Bell Trap.

Price, each..... 3.50

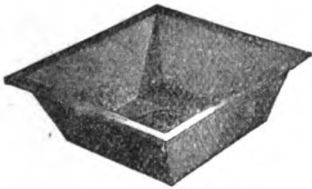


Fig. 329.

HYDRANT CESSPOOL.

Size, inches.....	12 x 12	14 x 14	16 x 16
Depth, inches.....	6	6	6
Price, Plain.....	1.80	2.00	2.50

CESSPOOL.

With Bell Trap.



Fig. 330.

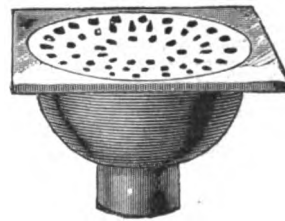


Fig. 331.

Size, 4 x 4, 1 1/4 inch Outlet, each.....	.50
" 6 x 6, 1 1/2 " " ".....	.75
" 9 x 9, 3 " " ".....	1.00
" 13 x 13, 4 " " ".....	2.50

EXTRA HEAVY STABLE CESSPOOL.

With Bell Trap and Grating.

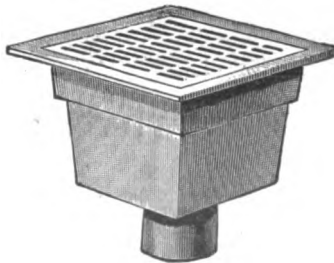


Fig. 332.

Size, 16 x 16, Depth, 10 inch, 4 inch Outlet, each.....	4.50
Size, 27 x 19 1/2, Depth, 14 inch, 4 inch Outlet, each.....	14.00

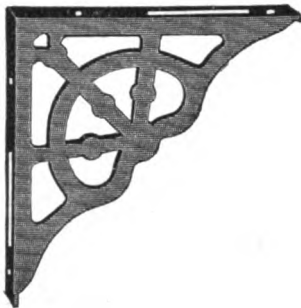
SINK BRACKET.

Fig. 333.

	Plain.	Galvanized.
Price, No. 1, takes Sink up to 18 inches wide.....	.60	1.00
" " 2, " " " 23 " .....	.75	1.25
" " 3, " " " 32 "	1.00	1.50

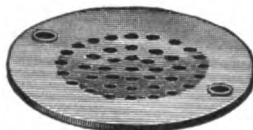
SINK STRAINER.

Fig. 334.

Price, Plain, per doz.....	1.50
Price, Galvanized, per doz.....	2.60
Price, Gray Enameled, per doz	2.60
Price, White Enameled, per doz	3.00

SINK COUPLINGS.

Tapped for Iron Pipe Waste.



Fig. 335.



Fig. 336.

Price, Plain, per doz., Fig. 335.....	2.00
Tapped for Iron Pipe, Fig. 336, each.....	.75

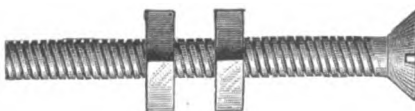
SINK BOLT.

Fig. 337.

Price, per doz... ..	.40
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PATENT GLOBE VENTILATORS.

Galvanized Iron.



Fig. 338.

Size, inches	2	2½	3	4	5	6	7	8	10	12
Price, each.....	1.00	1.00	1.50	1.75	2.50	3.40	4.00	4.65	5.75	6.75

CAST BOILER STAND.

Fig. 339.

SIZE.		Price, Plain.	Price, Galvanized.
12 inch Ring, for	18, 24 and 30 gallon Boilers.....	1.25	2.50
18 " " "	35 gallon Boilers.....	1.35	2.60
14 " " "	40 gallon Boilers.....	1.40	2.70
16 " " "	52 and 63 gallon Boilers.....	1.85	3.25
18 " " "	66 gallon Boilers.....	2.00	3.80
20 " " "	82 gallon Boilers.....	2.25	4.50
22 " " "	100 and 120 gallon Boilers.....	2.75	5.00
24 " " "	120, 144, 168 and 192 gallon Boilers.....	3.50	6.50

IRON BATH TUB.

French Pattern.

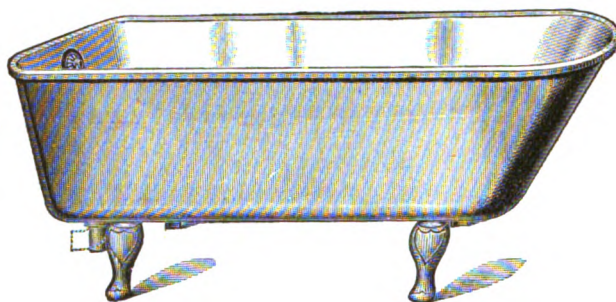


Fig. 340.

Sizes	4 ft.	4½ ft.	5 ft.	5½ ft.	6 ft.
Price, Painted.....	18.00	20.00	22.00	24.00	26.00
Price, Porcelain Lined.....	34.00	38.00	42.00	46.00	50.00
If with Wood Rim, add.. ..	9.00	9.50	10.00	11.00	12.00

If tapped at bottom for Iron Pipe, Hot and Cold Water Supply and Waste, 1.50.

All French Tubs are 23 inches wide, 19 inches deep, and 25 inches from floor to top of rim.

IRON BATH TUB.

Plain Pattern.

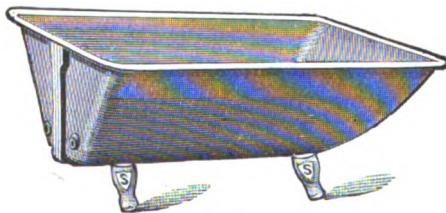


Fig. 341.

Sizes.....	4½ ft.	5½ ft.	6 ft.
Price, Plain.....	18.00	20.00	22.00
Price, Porcelain Lined.....	33.00	36.00	42.00

If tapped at bottom for Iron Pipe, Hot and Cold Water Supply and Waste, 1.50.

All Plain Pattern Tubs are 26 inches wide, 19 inches deep, and 23 inches from floor to top of rim.

IRON WASH STANDS.**HALF CIRCLE AND CORNER WASH STANDS.**

On Standard, Patent Overflow, Nickel Plated Plug, Rubber Stopper and Brass Couplings.



Fig. 342.

Height to front of Slab, 28 in. Height to top of Back, 32 in. Length of Back, 19 in.
Diameter of Bowl, 12½ in.

Enameled, on Bronzed Standard 9.50



Fig. 343.

Height to front of Slab, 28 in. Height to top of Back, 32 in. Length on Side, 13½ in.
Diameter of Bowl, 12½ in.

Enameled, on Bronzed Standard. 9.50

IRON SLABS AND BOWLS.

Patent Overflow, Nickel Plated Plug, Rubber Stopper and Brass Coupling.

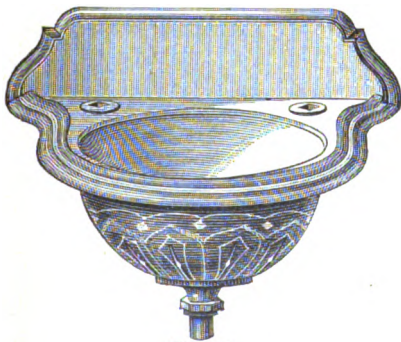


Fig. 344.

Length of Back, 19 in. Diameter of Bowl 12½ inches.

Enameled, Bronzed Outside 7.50

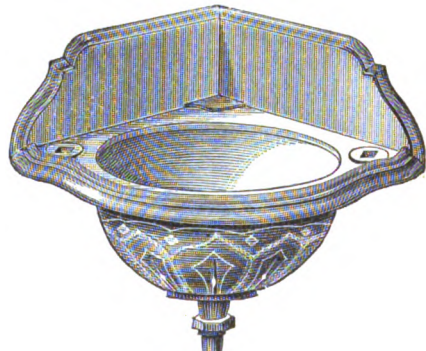


Fig. 345.

Length on Side, 12½ in. Diameter of Bowl, 12½ inches.

Enameled, Bronzed Outside 7.50

IRON WASH BASINS.

Common Overflow, Enameled.

Patent Overflow, Rubber Plug, Enameled.



Fig. 346.



Fig. 347.

Price, 14 inch, each.....	3.00	Price, 14 inch, each.....	3.50
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The above prices include Plated Plugs and Stoppers.

IRON HALF CIRCLE URINAL. IRON CORNER URINAL.

Plain and Enameled.

Plain and Enameled.



Fig. 348.

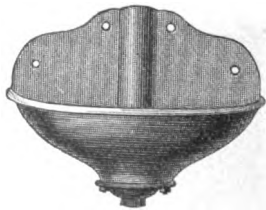


Fig. 349.

Size, inches	12	15	Size, inches	9	12
Price, Plain, each	1.15	1.50	Price, Plain, each.....	1.15	1.45
Price, Enameled, each	2.50	3.00	Price, Enameled, each.....	2.25	2.75

IRON HOPPER.

Philadelphia Pattern, with Side Arm.



Fig. 350.

Height, 16 inches. Diameter on top, 14 inches. Outlet, $3\frac{1}{4}$ inches.

Price, Enameled..... 2.00

IRON HOPPER.

New Pattern, with Side Arm.

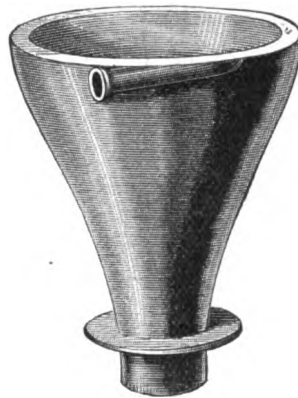


Fig. 351.

Height, $16\frac{1}{2}$ inches. Diameter on top, 14 inches. Outlet, $3\frac{1}{4}$ inches.

Price, Enameled..... 2.00

IRON FRENCH, OR SHORT HOPPER.

Plain, Painted, Galvanized and Enameled.



Fig. 352.

Height, 8 inches. Outlet for 4 inch Soil Pipe.

Price, Enameled..... 2.75

IRON HOPPER VALVE CLOSET.

STRAIGHT.

Self-Raising Round Seat,



Fig. 353.

Price, Enameled, each..... 9.00

IRON HOPPER VALVE CLOSET.

WITH TRAP.

Self-Raising Round Seat.



Fig. 354.

Price, Enameled, each..... 10.00

IXL VALVE CLOSET.



Fig. 355.

Price, with Brass Cup and Pull, each 7.00

HARRISON VALVE CLOSET.

Price, each, net.....

BARTHOLEMEW VALVE CLOSET.

Price, each, net.....

PHILADELPHIA IMPROVED VALVE CLOSET.

Price, each, net.....

Price on application.

RUBBER COUPLING.

For Water Closet Bowls, Urinals, Hoppers, Wash Basins, etc.



Fig. 355a.

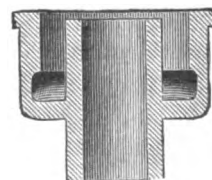


Fig. 355b.—Sectional View.

Price. Per doz..... 1.50

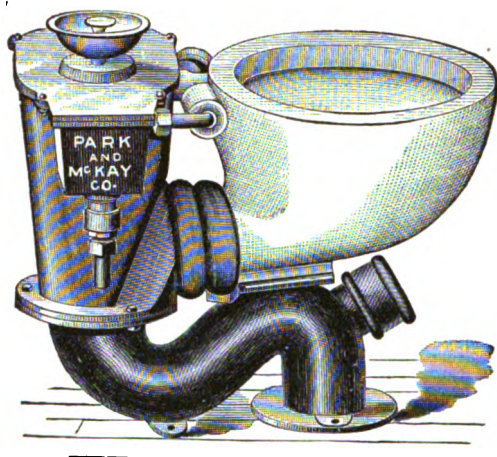
DETROIT SANITARY.

Fig. 356.

The "Detroit Sanitary" is simple in construction, durable, absolutely noiseless, has fine workmanship and finish, and the material the best.

Price..... 20.00

Furnished with Straight Outlet, Offset, or Trap.

THE WOLVERINE.

Side Outlet.

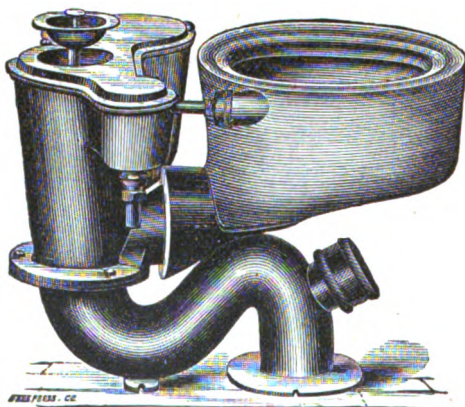


Fig. 357.

The valve of the "Wolverine" is the most simple and perfect of any made. Why it is the best:

1. It will close off equally as well under 1 lb. pressure as 150 lbs.
2. Will not hammer under any pressure.
3. It will close off perfectly tight either under clean or dirty water.
4. There is no brass working against brass, therefore it cannot corrode or stick.
5. We use no springs, in fact it is a perfect balance valve.

OUR GUARANTEE TO ARCHITECTS AND PLUMBERS.

Should the Wolverine Sanitary Water Closet not work perfectly under any and all circumstances, the closet will be replaced or purchase money refunded.

Price..... 20.00

Furnished with Straight Outlet, Offset, or Trap.

**SHORT EARTHEN HOPPER,
WITH TRAP.**

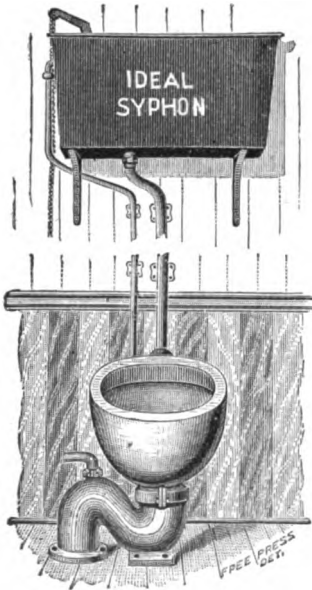


Fig. 338.

**PHILADELPHIA
EARTHEN HOPPER.**

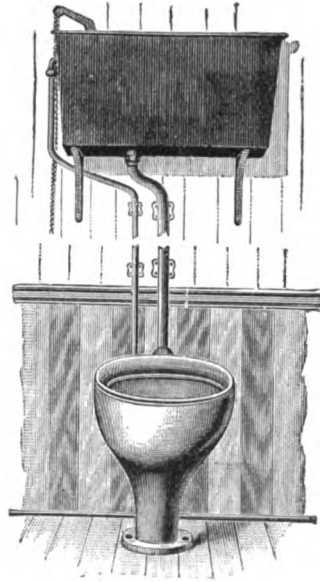


Fig. 359.

With Iron Syphon Tank.....	20.00	With Iron Syphon Tank.....	16.50
With Iron Pull Tank.....	17.50	With Iron Pull Tank	14.00
Add for Copper Lined Wood Syphon Tank..	2.00	Add for Copper Lined Wood Syphon Tank..	2.00
Add for Seat and Legs.....	6.00	Add for Seat and Legs.....	6.00

FRONT OUTLET WASHOUT CLOSET.

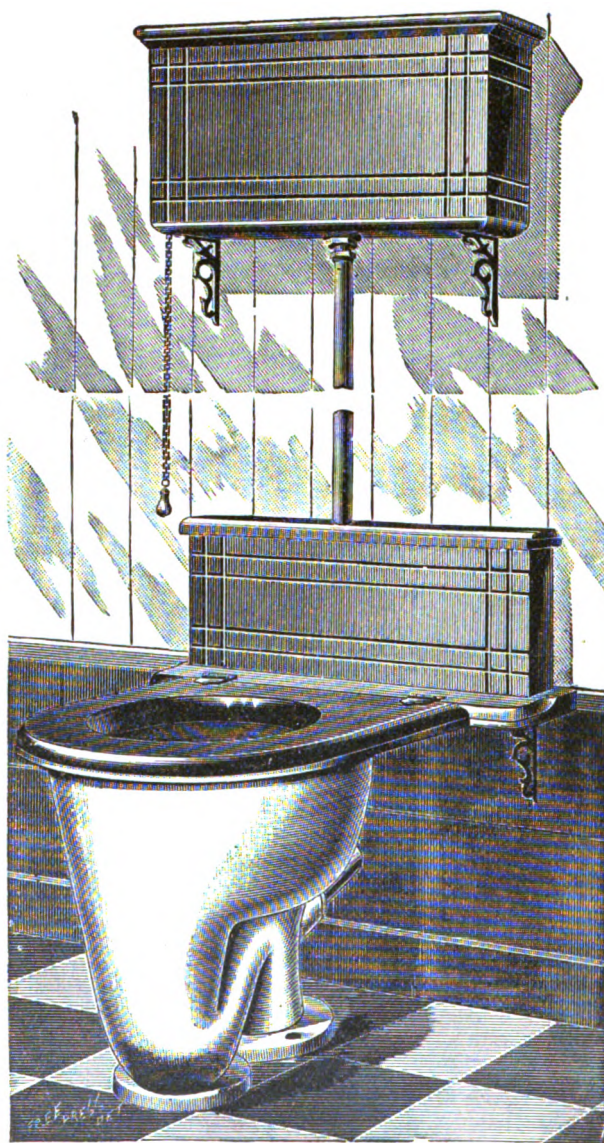
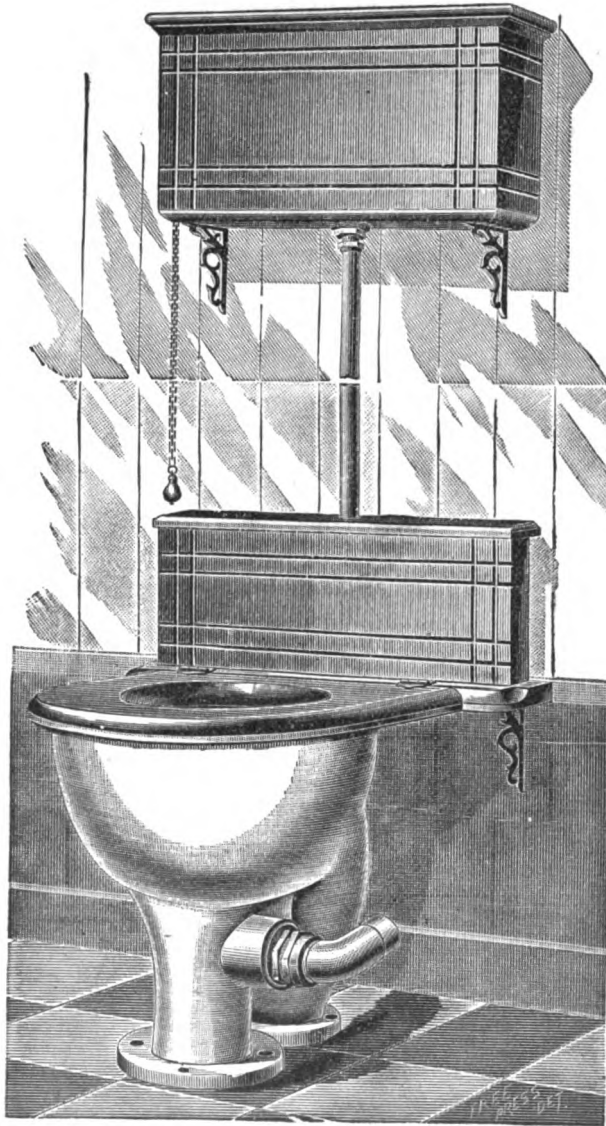


Fig. 360.

With Wood, Copper Lined, Syphon Paneled Tank, Seat and Back.....	45.00
With Iron Syphon Tank, no Seat.....	30.50
Add for Wood, Copper Lined Tank	2.00
Add for Seat and Galvanized Legs.....	6.00

BACK OUTLET WASHOUT CLOSET.**Fig. 361.**

With Wood, Copper Lined Syphon Paneled Tank, Seat and Back, as shown.....	45.00
With Iron Syphon Tank, no Seat.....	30.50
Add for Wood, Copper Lined Tank.....	2.00
Add for Seat and Galvanized Legs.....	6.00

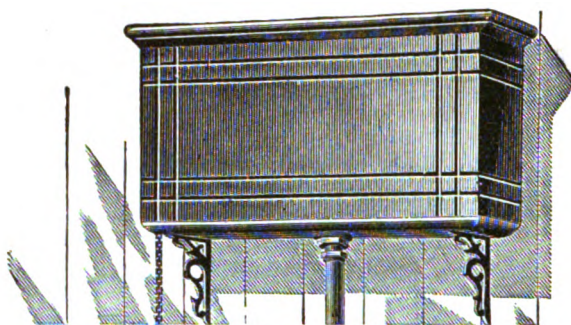
CLOSET TANKS.

Fig. 362.

Paneled Tank, Copper Lined Syphon.....	15.00
Plain Tank, Copper Lined Syphon.....	10.00
Iron Tank Syphon.....	8.50
Iron Tank Pull	6.00

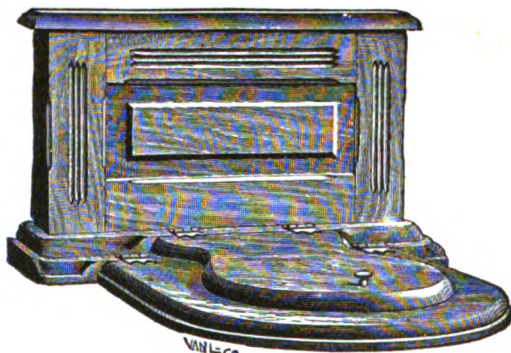
CLOSET SEATS.

Fig. 363a.

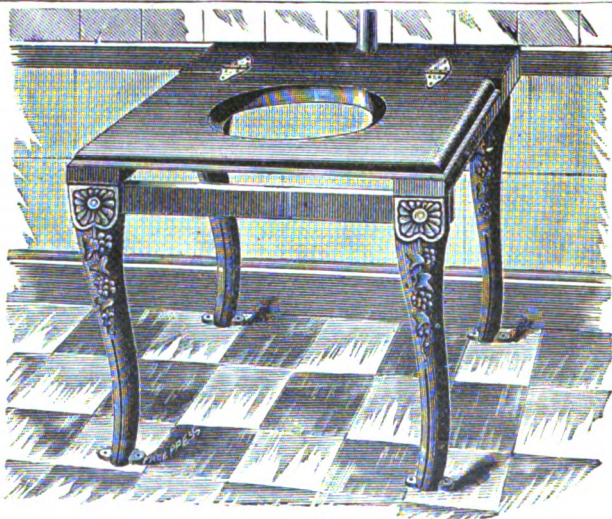


Fig. 363b.

Seat, with Back for Pedestal.....	10.00
Add for Cover.....	2.00
Seat, with Galvanized Legs.....	6.00

EARTHENWARE.

ENAMELED IRON DRIP TRAY. HOPPER, PHILADELPHIA PATTERN.

Oval or Round.

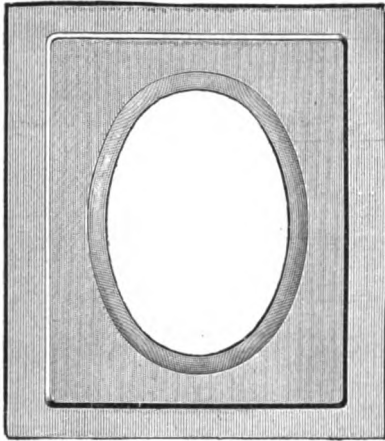


Fig. 364.

Earthenware.



Fig. 365.

Price, each.....	2.50	Price, each.....	3.25
Price, each, Earthenware.....	3.50	Flushing Rim.....	7.50

FLUSHING RIM LONG OVAL
EARTHENWARE HOPPER.



Fig. 366.

FLUSHING RIM SHORT OVAL
EARTHENWARE HOPPER, WITH
EARTHENWARE TRAP.

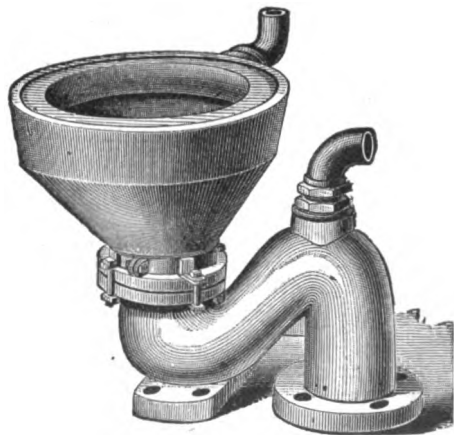


Fig. 367.

Price, each.....	9.00	Price, each.....	10.00
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URINALS.

FLAT URINAL.

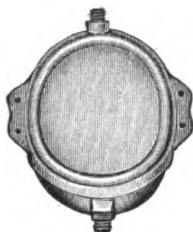


Fig. 368.

	Large.	Small.
Size, inches.....	15 x 18	11½ x 14
Price, each.....	6.90	4.85

LIPPED URINALS.



Fig. 369.

	Large.	Small.	Not Illustrated.	Large.	Small.
Size, Flat, Fig. 369.....	15 x 18	12 x 15	Size, Corner, Fig. 370..	12 x 12	11 x 11
Price, each.....	10.00	8.25	Price, each	10.00	8.25

CORNER URINALS.

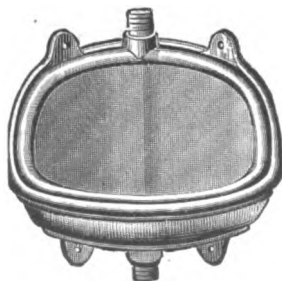


Fig. 371.

	Large.	Small.
Size, inches.....	12 x 12	10¼ x 10¼
Price each	6.90	4.85

COMMON OVERFLOW WASH BASIN.**For Metal Plug.**

Fig. 372.

Diameter, outside, inches.....	12	13	14	15	16
Price, each	1.05	1.25	1.40	2.00	2.75

PATENT OVERFLOW WASH BASIN.**For Metal Plug.**

Fig. 373.

Diameter, outside, inches.....	12	13	14	15	16
Price, each	1.15	1.30	1.50	2.25	3.00

PATENT OVERFLOW WASH BASIN.**For Rubber Plug.**

Fig. 374.

Diameter, outside, inches.....	12	13	14	15	16
Price, each.....	1.40	1.55	1.70	2.50	3.50

We carry a large stock of Decorated Basins, both Round and Oval, varying in prices from \$3.00 to \$13.00.

OVAL WASH BASIN.**For Metal Plug.**

Fig. 375.

Diameter, outside, inches.....	15 x 19
Price, each.....	5.00

WASH BASIN WITHOUT OVERFLOW.**For Metal Plug.**

(Not Illustrated.)

Diameter, outside, inches.....	12	13	14	15	16
Price, each... ..	.80	1.00	1.15	1.80	2 25

ROUND CLOSET BOWL.

Fig. 376.

Price, each.....	1.45
------------------	------

SLAB AND BASIN COMBINED.**Square or Flat Back.**

Fig. 377.

Size of Slab, inches.....	18 x 18	14 x 14
Inside Diameter of Basin, inches.....	11	11
Price, each.....	9.25	6.50

SOAPSTONE AND SLATE LAUNDRY TUBS.

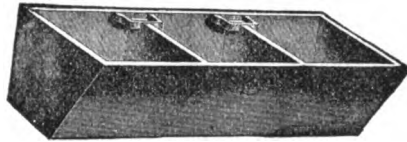


Fig. 378.

All measurements are outside.

Number Parts.....	2	3
Length.....	4 ft. 6 in.	6 ft.
Width.....	2 ft.	2 ft.
Depth.....	16 in.	16 in.
Price, Soapstone, each.....	26.50	36.00
Price, Slate, each.....	20.00	27.00

Soap Cup and Backs extra, and are never sent unless specially ordered.

Add for Galvanized Legs for Two-Part Wash Tray, net.....	4.50
Add for Galvanized Legs for Three-Part Wash Tray, net.....	6.00

SOAPSTONE AND SLATE SINKS.

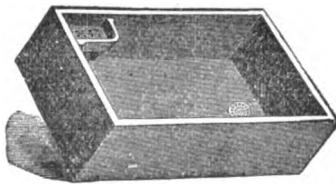


Fig. 379.

Length.....	2 ft.	3 ft.	3 ft. 6 in.	4 ft.
Width	18 in.	20 in.	22 in.	24 in.
Depth.....	7 in.	7 in.	7 in.	7 in.
Price, Soapstone, each.....	8.50	10.50	11.50	14.50
Price, Slate, each.....	5.50	7.00	7.50	9.50

Soap Cups, extra 50 cents.

MARBLE. CORNER SLAB.

With Two Backs.

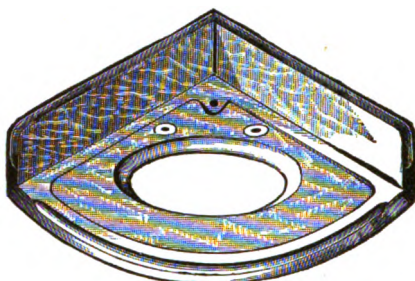


Fig. 380.

Size of Slab, inches.....	18	19	20	21	22	24
No. of Feet in Slab with 8 inch Backs	4 ft. 10 in.	5 ft. 3 in.	5 ft. 9 in.	6 ft. 3 in.	6 ft. 6 in.	7 ft. 6 in.
No. of Feet in Slab with 10 inch Backs...	6 ft. 3 in.	6 ft. 9 in.	7 ft. 2 in.	7 ft. 7 in.	8 ft. 1 in.	9 ft.
* No. of Feet in Slab with 12 inch Backs..	7 ft. 2 in.	7 ft. 7 in.	8 ft. 1 in.	8 ft. 7 in.	9 ft.	10 ft. 1 in.

SQUARE SLAB.

With Single Back.

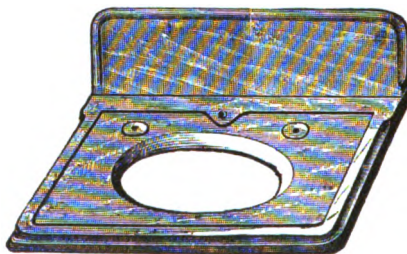
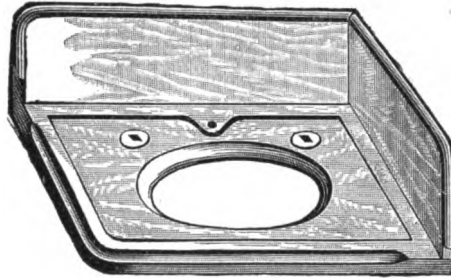


Fig. 381.

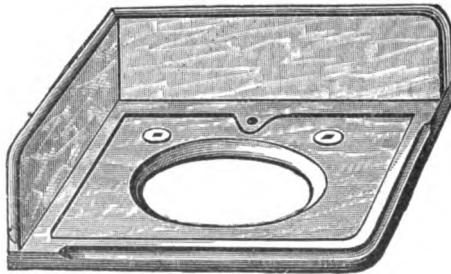
Size of Slab, inches.....	19 x 24	19 x 26	20 x 24	20 x 26
No. of Feet in Slab with 8 inch Back.....	5 ft. 3 in.	5 ft. 8 in.	5 ft. 6 in.	6 ft.
No. of Feet in Slab with 10 inch Back.....	5 ft. 7 in.	6 ft. 1 in.	5 ft. 11 in.	6 ft. 3 in.
No. of Feet in Slab with 12 inch Back.....	6 ft.	6 ft. 5 in.	6 ft. 2 in.	6 ft. 8 in.
Size of Slab, inches.....	20 x 28	20 x 30	22 x 30	22 x 36
No. of Feet in Slab with 8 inch Back.....	6 ft. 4 in.	6 ft. 8 in.	7 ft. 1 in.	8 ft. 6 in.
No. of Feet in Slab with 10 inch Back.....	6 ft. 8 in.	7 ft. 2 in.	7 ft. 7 in.	9 ft.
No. of Feet in Slab with 12 inch Back.....	7 ft. 1 in.	7 ft. 7 in.	8 ft.	9 ft. 6 in.

All Slabs are shipped with 8 inch Backs unless otherwise ordered.

We carry every size named in our list in stock cut for two cock holes. When wanted for one cock hole the same slab can be used by putting in either a Chain Stay or Cock Hole Plug. All Slabs cut for 14 inch Basins unless otherwise ordered. Slabs without Backs cost more per foot than when furnished with Backs. Slabs for Oval Basins or Combination Cocks should be either 22 or 24 inches wide.

SQUARE SLAB.**With Back and Right Hand End.****Fig. 382.**

Size of Slab, inches.....	19 x 24	20 x 24	20 x 26	20 x 28	20 x 30
No. of Feet in Slab with 8 inch Backs.....	6 ft. 4 in.	6 ft. 7 in.	7 ft.	7 ft. 6 in.	7 ft. 9 in.
No. of Feet in Slab with 10 inch Backs....	6 ft. 11 in.	7 ft. 2 in.	7 ft. 7 in.	8 ft. 1 in.	8 ft. 6 in.
No. of Feet in Slab with 12 inch Backs....	7 ft. 6 in.	7 ft. 10 in.	8 ft. 4 in.	8 ft. 9 in.	9 ft. 2 in.

SQUARE SLAB.**With Back and Left Hand End.****Fig. 383.**

Size of Slab, inches.....	19 x 24	20 x 24	20 x 26	20 x 28	20 x 30
No. of Feet in Slab with 8 inch Backs.....	6 ft. 4 in.	6 ft. 7 in.	7 ft.	7 ft. 6 in.	7 ft. 9 in.
No. of Feet in Slab with 10 inch Backs...	6 ft. 11 in.	7 ft. 2 in.	7 ft. 7 in.	8 ft. 1 in.	8 ft. 6 in.
No. of Feet in Slab with 12 inch Backs....	7 ft. 6 in.	7 ft. 10 in.	8 ft. 4 in.	8 ft. 9 in.	9 ft. 2 in.

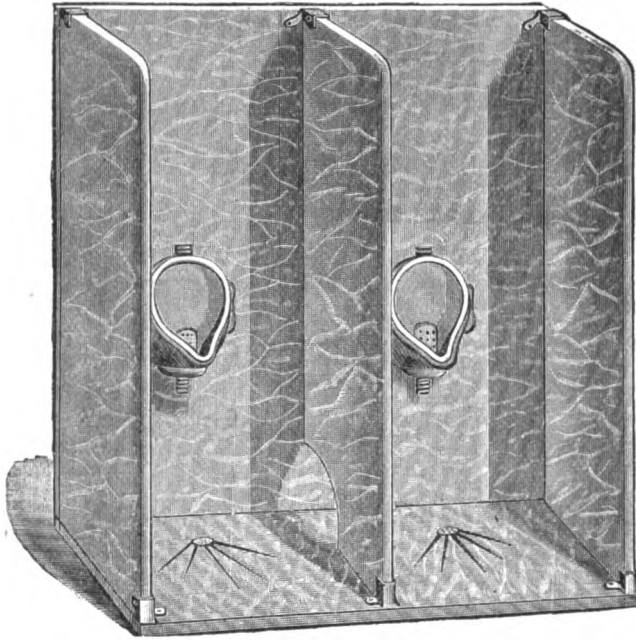
URINAL STALLS.

Fig. 384.

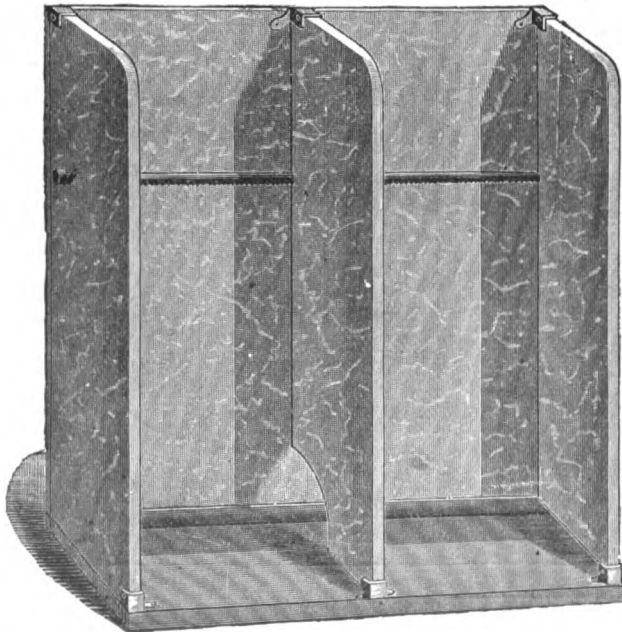


Fig. 385.

We make Urinal Stalls of all descriptions, using the Foster Patent Fastenings. In ordering, it is always best to send drawing and full specifications of just what is wanted. The figures above are the style generally used.

We also make Urinal Stalls of slate and marble, with glass back when wanted. Estimates furnished on any specification.

GALVANIZED IRON RANGE BOILERS.


	Capacity.	Size.	Price.
	* 18 gallons	3 ft. x 12 in.	14.50
	* 21 "	3½ " x 12 "	15.50
	* 24 "	4 " x 12 "	15.75
	27 "	4½ " x 12 "	18.50
	* 30 "	5 " x 12 "	19.00
	* 35 "	5 " x 13 "	21.00
	36 "	6 " x 12 "	24.50
	24 "	3 " x 14 "	19.00
	28 "	3½ " x 14 "	20.25
	32 "	4 " x 14 "	21.00
	36 "	4½ " x 14 "	21.50
	* 40 "	5 " x 14 "	24.00
	48 "	6 " x 14 "	30.00
	42 "	4 " x 16 "	26.00
	47 "	4½ " x 16 "	30.00
	* 52 "	5 " x 16 "	31.00
	* 63 "	6 " x 16 "	88.00
	53 "	4 " x 18 "	31.50
	* 66 "	5 " x 18 "	38.00
	79 "	6 " x 18 "	44.00
	* 82 "	5 " x 20 "	45.50
	98 "	6 " x 20 "	61.50
	* 100 "	5 " x 22 "	63.50
	120 "	6 " x 22 "	74.00
	* 120 "	5 " x 24 "	72.50
	144 "	6 " x 24 "	103.00
	168 "	7 " x 24 "	120.00
	192 "	8 " x 24 "	132.00

Fig. 386.

All Boilers are Tested and Warranted. Prices are for Boilers only. Stands, Tube and Coupling are extra.

Sizes marked with a * are always in stock; other sizes made to order.

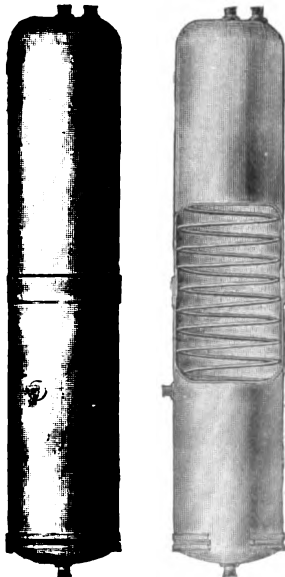


Fig. 387.

SEAMLESS COPPER RANGE BOILERS.

Heavy Pressure.

Capacity.	Price, Each.
30 gallons	30.00
40 "	40.00
60 "	60.00
80 "	80.00
100 "	100.00

COPPER GOODS

COPPER BATH TUB.

5, 5½ or 6 feet long.

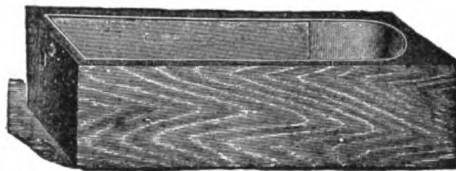


Fig. 388.

Outside Width at Head and Foot.....24 inches. | Outside Depth.....19 inches.
Outside Length of Tubs, 5, 5½, and 6 feet.

Weight of Copper, ounces.....	10	12	14	16	18	20
Price, each.....	15.00	16.00	18.00	20.00	22.00	24.00

Zinc Tubs, 5, 5½ or 6 feet, price, each... 8.00 | Larger or Special Sizes of Tubs to order.

FRENCH BATH TUB.

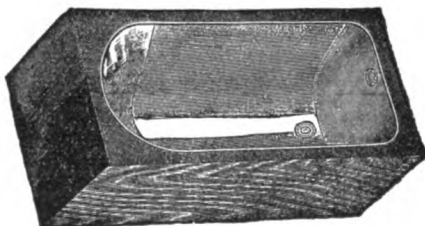


Fig. 389

Outside Width at Head and Foot.....26¼ inches. | Outside Depth.....22 inches.
Standard Length, 4½ feet.

Weight of Copper, ounces.....	10	12	14	16	18	20
Price, 4 feet, 6 inch long (Standard), each	16.00	17.00	19.00	21.00	23.00	25.00
“ 5 “ long, each.....	18.00	19.00	21.00	23.00	25.00	27.00
“ 5 “ 6 inch long, each.....	20.00	21.00	23.00	25.00	27.00	29.00
“ 6 “ long, each.....	22.00	23.00	25.00	27.00	29.00	31.00

SEAT TUB.

Size, 24 x 23 inches.

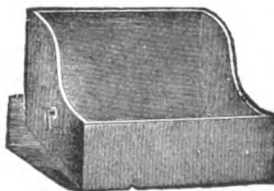


Fig. 390

Weight of Copper, ounces.....	10	12	14	16
Price, each	10.00	11.00	12.00	13.00

FOOT TUB.

Size, 16 x 20 inches, 10 inches deep.

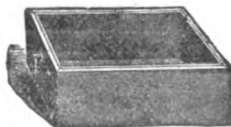
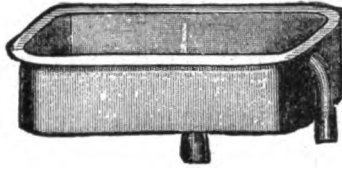


Fig. 391.

Weight of Copper, ounces.....	10	12	14	16
Price, each.....	7.50	8.50	9.50	10.50

SQUARE COPPER PANTRY SINK.**Fig. 392.**

Size, inches.....	12 x 18	12 x 20	14 x 16	14 x 20	14 x 24	16 x 24	16 x 30	18 x 30
Price, each.....	4.50	5.00	4.50	6.00	7.00	8.00	10.00	11.00

OVAL COPPER PANTRY SINK.**Fig. 393.**

Size, inches.....	12 x 18	12 x 20	14 x 16	14 x 20	14 x 24	16 x 24	16 x 30	18 x 30
Price, each.....	6.00	6.50	6.00	7.50	9.00	10.00	12.00	13.00

COPPER BALL.**Fig. 394**

Size, inches.....	5	6	7	8	10	12
Price, per doz.....	6.00	7.00	10.50	24.00	48.00	72.00

CLOSET PAN.**Fig. 395.**

Weight, ounces, Copper.....	18	20	24
Price, per doz.....	8.00	10.00	12.00

LEAD TRAPS AND BENDS.

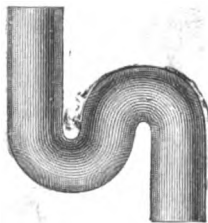


Fig. 396.

FULL S TRAP.

Price, 4 inch, each.....	1.90
" 3 " with Trap Screw.....	1.70
" 2 " " ".....	1.10
" 1½ " " ".....	.80
" 1¼ " " ".....	.65

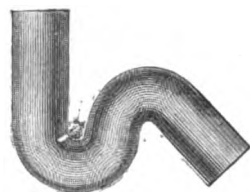


Fig. 397.

THREE QUARTER S TRAP.

Price, 4 inch, each.....	1.90
" 3 " with Trap Screw.....	1.70
" 2 " " ".....	1.10
" 1½ " " ".....	.80
" 1¼ " " ".....	.65

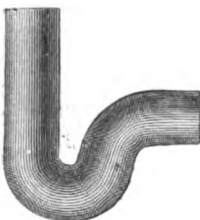


Fig. 398.

HALF S TRAP.

Price, 4 inch, each.....	1.55
" 3 " with Trap Screw.....	1.35
" 2 " " ".....	1.00
" 1½ " " ".....	.70
" 1¼ " " ".....	.55

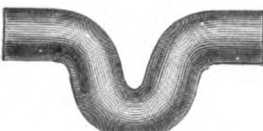


Fig. 399.

RUNNING TRAP.

Price, 4 inch, each.....	2.20
" 3 " with Trap Screw.....	1.70
" 2 " " ".....	1.10
" 1½ " " ".....	.80
" 1¼ " " ".....	.65

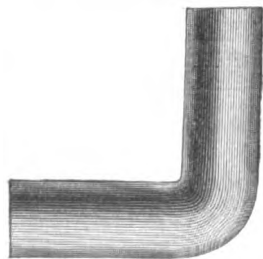


Fig. 400.

LONG LEAD BEND.

Price, 4 inch, each.....	1.35
" 3 " ".....	1.00
" 2 " ".....	.55
" 1½ " ".....	.45
" 1¼ " ".....	.40



Fig. 401.

SHORT LEAD BEND.

Price, 4 inch, each.....	0.90
" 3 " ".....	.75
" 2 " ".....	.45
" 1½ " ".....	.40
" 1¼ " ".....	.30

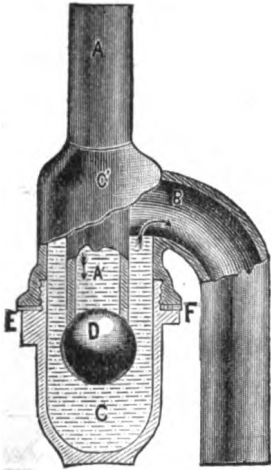
BOWER'S TRAPS.**S Trap.**

Fig. 402.

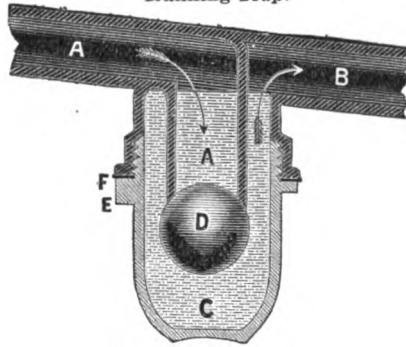
Running Trap.

Fig. 403.

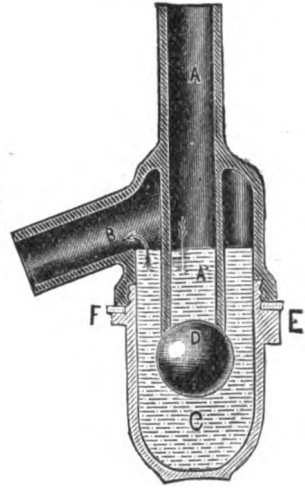
Half S Trap.

Fig. 404.

SIZE.		FULL S.		HALF S.		RUNNING.	
Inlet.	Outlet.	Lead and Glass, Price, each.	All Lead, Price, each.	Lead and Glass, Price, each.	All Lead, Price, each.	Lead and Glass, Price, each.	All Lead, Price, each.
1 inch.	1 1/4 inch.	1.00	1.20	0.95	1.15		
1 1/4 "	1 1/4 "	1.05	1.25	1.00	1.20	1.10	1.30
1 1/4 "	1 1/2 "	1.10	1.30	1.05	1.25		
1 1/2 "	1 1/2 "	1.38	1.63	1.30	1.55	1.40	1.65
1 1/2 "	2 "	1.50	1.75	1.40	1.65		

EXTRAS.

Price, Small Glasses, each.....	0.10
" Large " " .....	.15
" Small Balls, " .....	.10
" Large " " .....	.15
" Small Lead Cups, each.. ..	.30
" Large " " .....	.40

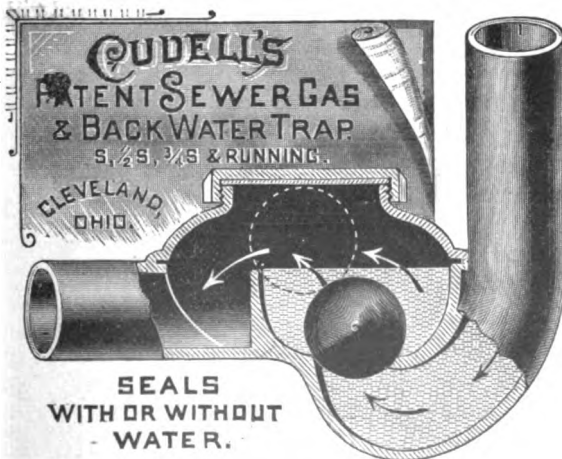
CUDELL'S TRAPS.

Fig. 405.

Fig. 405.

SIZE.		EACH.
Inlet.	Outlet.	
1 1/4 inch.	1 1/4 inch.	0.95
1 1/2 "	1 1/2 "	1.25
1 1/2 "	2 "	1.35

One price for Full S, Half S and Running.

SOLE AGENTS FOR THE
CELEBRATED WOLVERINE HYDRANTS.

Simple, Heavy, Durable, Tested and Guaranteed Positively Anti-Freezing.

No Packing in top of this Hydrant. All Valves have our Patent Waste Chamber.



Fig. 406

FIG. 406. SIZES AND LIST PRICES.

To Set in Ground.	Opening $\frac{3}{4}$ in.	Opening 1 in.	Opening $1\frac{1}{4}$ in.
$1\frac{1}{2}$ foot.....	9.80	12.70	19.70
2 "	10.10	13.50	20.50
$2\frac{1}{2}$ "	10.35	13.90	21.15
3 "	10.60	14.30	21.80
4 "	11.00	14.75	22.25
5 "	11.50	15.30	22.80
6 "	12.00	16.00	23.75
8 "	13.50	18.50	27.00
10 "	16.00	21.00	30.00

Closes against the pressure, no reaction. Can be repaired without digging up. Water passes through inner pipe. Outer pipe or frost casing is $1\frac{1}{4}$ inch for $\frac{3}{4}$ Hydrant.

Waste Chamber has a clear area equal to the area of inner pipe, and will hold all waste water without first requiring absorption by the ground.

Guaranteed to give satisfaction in any kind of soil or climate. It is positively the heaviest and best low priced Hydrant on the market.

All repairs kept constantly on hand.

WOLVERINE STREET WASHER.

Simple, Heavy, Durable, Tested and Guaranteed Positively Anti-Freezing.

No Packing in the top operating mechanism. All Valves have our Patent Waste Chamber.

Fig. 407. Straight Outlet,

Cast Box.

Cast Iron Box, Straight Old Style
Outlet, with Key.



Fig. 407.

To Set in Ground.	Open'g $\frac{3}{4}$ in.	Open'g 1 in.	Open'g $1\frac{1}{4}$ in.	Open'g $1\frac{1}{2}$ in.	Open'g 2 in.
1 $\frac{1}{2}$ ft.	6.60	9.50	18.00	26.00	36.00
2 "	6.85	10.25	18.75	27.25	37.25
2 $\frac{1}{2}$ "	7.10	10.70	19.45	28.20	37.80
3 "	7.35	11.10	20.10	29.10	38.50
4 "	7.75	11.70	20.70	29.70	40.00
5 "	8.25	12.00	21.00	30.50	42.00
6 "	8.85	12.75	21.75	31.75	44.00
8 "	10.25	15.25	25.25	37.00	50.00
10 "	12.75	17.75	28.75	43.00	58.00

Cast Iron Box, Bent Swivel Outlet,
with Key.

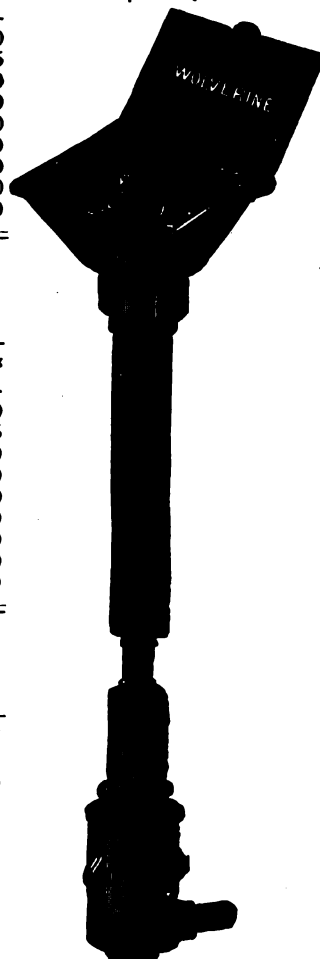


Fig. 408.

Fig. 408. Swivel Outlet,

Cast Box.

To Set in Ground.	Open'g $\frac{3}{4}$ in.	Open'g 1 in.	Open'g $1\frac{1}{4}$ in.	Open'g $1\frac{1}{2}$ in.	Open'g 2 in.
1 $\frac{1}{2}$ ft.	7.85	11.50	20.00	29.00	40.00
2 "	8.10	12.25	20.75	30.25	41.25
2 $\frac{1}{2}$ "	8.35	12.70	21.45	31.20	41.80
3 "	8.60	13.10	22.10	32.10	42.50
4 "	9.00	13.70	22.70	32.70	44.00
5 "	9.50	14.00	23.00	33.50	46.00
6 "	10.10	14.75	23.75	34.75	48.00
8 "	11.50	17.25	27.25	40.00	54.00
10 "	14.00	19.75	30.75	46.00	62.00

Fig. 408. Swivel Outlet,

Malleable Iron Box.

To Set in Ground.	Open'g $\frac{3}{4}$ in.	Open'g 1 in.	Open'g $1\frac{1}{4}$ in.	Open'g $1\frac{1}{2}$ in.	Open'g 2 in.
1 $\frac{1}{2}$ ft.	9.00	13.50	22.00	32.00	44.00
2 "	9.35	14.25	22.75	33.25	45.25
2 $\frac{1}{2}$ "	9.60	14.70	23.45	34.20	45.80
3 "	9.85	15.10	24.10	35.10	46.50
4 "	10.25	15.70	24.70	35.70	48.00
5 "	10.75	16.00	25.00	36.50	50.00
6 "	11.35	16.75	25.75	37.75	52.00
8 "	12.75	19.25	29.25	43.00	58.00
10 "	15.25	21.75	32.75	49.00	66.00

When ordered in lots of 1 Doz., we CAST ANY NAME DESIRED ON COVER.

All repairs kept constantly on hand.

EAGLE HYDRANT.

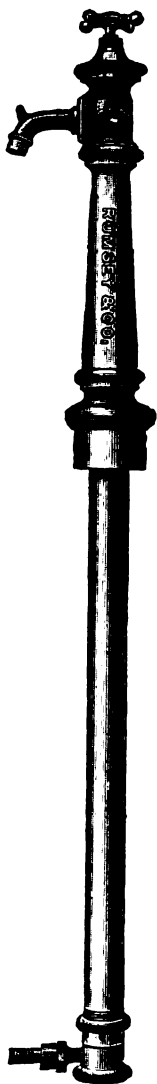


Fig. 409.

Fig. 409 represents our improved style of Hydrants for house use. We believe this to be the best in the market, in all respects. By an ingenious device they are so arranged that closing the valve opens the drip, and vice versa, making them strictly anti-freezing. At the bottom a swivel and union coupling (of Brass, and having ground joints) furnishes a ready means of attaching them to the service pipes. We always recommend the use of lead pipe to connect them to service pipes to avoid the danger of breaking when the frost leaves the ground.

Fig. 410 shows very plainly our make of Street Washers. They are of the same construction and have the same style valve as Fig. 409, and they are excellently adapted for use where a Hydrant, on account of its height, would be undesirable.

A suitable wrench is furnished with each one.

Always measure from center of inlet pipe to ground line.

We feel sure that parties who have once tried our Hydrant will not use any other.



Fig. 410.

SIZES AND PRICES. FIG. 409.

FIG. 410.

Length to Set in the Ground.	Price $\frac{3}{4}$ inch.	Price, $\frac{3}{4}$ inch.
18 inch.	9.25	7.75
24 "	9.50	8.00
30 "	9.75	8.25
36 "	10.00	8.50
42 "	10.50	9.00
48 "	11.00	9.50
54 "	11.50	10.00
60 "	12.00	10.50
72 "	13.00	11.50

COMPRESSION FIRE HYDRANT.

Brass Mounted Rubber Valve, Positive Waste, Closes against the Pressure.

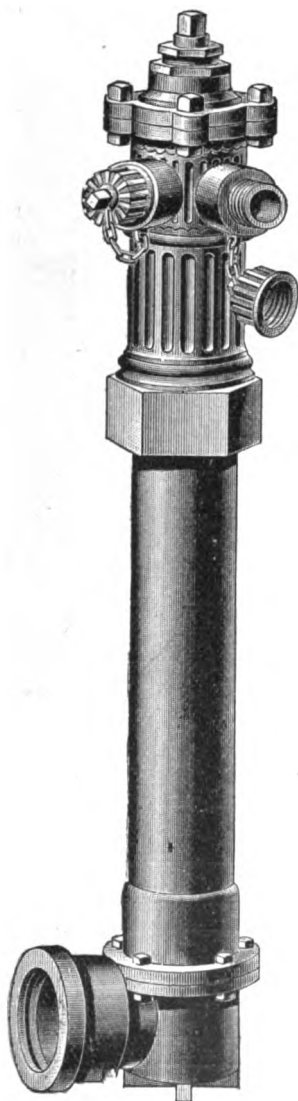


Fig. 411.

The operating mechanism and working of these Hydrants is fully shown and described in Special Catalogue.

Each and every Hydrant is thoroughly tested at factory to 400 pounds pressure, and is guaranteed to be free from flaws or defects, and to give satisfaction.

Frost Cases furnished if desired.

Unless otherwise ordered, all Hydrants will be made up to turn to the left in opening.

These Hydrants are also made with Wrought Stand Pipe, if so ordered.

The Nut for opening Hydrant and Nut on Nozzle Caps will always be made pentagon (or five-sided), unless otherwise ordered.

In ordering Hydrants, please give Full Details, as follows:

Wrought or Cast Iron Stand Pipe.

Length from Pavement to Center of Inlet.

Size of Bottom Connection.

Bell, Flange or Spigot Connection.

Size and Form of Nut to open Hydrant.

With or without Frost Case.

Number and Size of Hose Nozzles.

Number and Size of Steamer Nozzles.

State whether to turn to Right or Left to open.

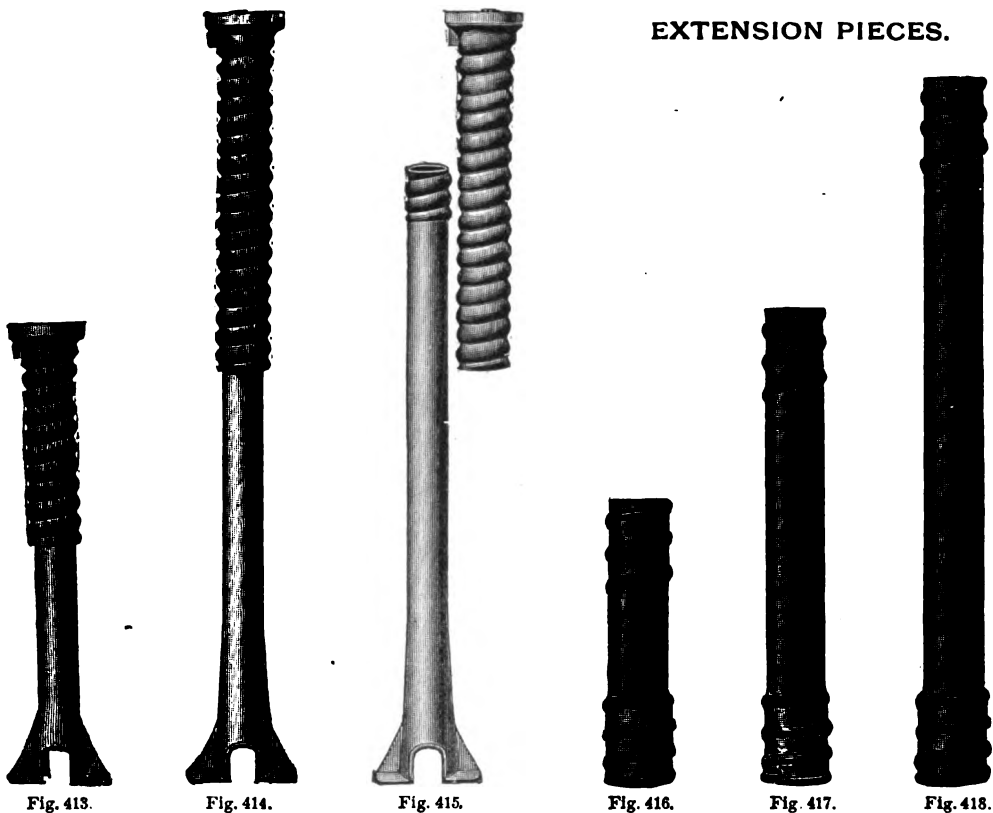
Send Coupling or Nozzle Cap for Gauge of Thread.

SIZES AND LIST PRICE.

Diameter of Inlet Pipe.	Pavement to Center of Inlet.	One 2½ in. Hose Nozzle.	Two 2½ in. Hose Nozzles.	Three 2½ in. Hose Nozzles.	One Steamer Nozzle.	One Steamer and one 2½ inch Nozzle.	One Steamer and two 2½ inch Nozzles.	Frost Case, Standard Length.	Each foot in length of Stand Pipe, extra.	Each foot in length of Frost Case, extra.
3 in.	5 ft.	27.50	29.50	31.50	29.00	31.50	33.50	3.00	1.20	0.50
4 "	5 "	32.00	34.00	36.00	34.00	36.00	38.00	4.00	1.50	.75
5 "	5 "	38.00	40.00	42.00	40.00	42.00	44.00	5.00	1.75	1.00
6 "	5 "	47.00	49.00	51.00	49.00	51.00	53.00	6.00	2.25	1.25

SERVICE BOXES FOR GAS AND WATER.

EXTENSION PIECES.



No. 0, Stationary length, 10 inches; diameter inside, in smallest part, 3½ inches.....	.....
" 1, 13 inches to 21 ¼ inches.....	.....
" 2, 2 feet to 3 feet 3 inches .....	.....
" 3, 2 feet 7 inches to 3 feet 11 inches.....	.....
" 4, 2 feet 9 inches to 4 feet 10 inches.....	.....
" 5, 3 feet 6 inches to 5 feet 6 inches.....	.....
" 7, 4 feet 1 inch to 6 feet 2 inches .....	.....
" 8, 6 feet 2 inches to 8 feet 2 inches.....	.....

Extension Pieces furnished for increasing length of Boxes 9, 16½ or 28 inches.

Key for Opening Cover.



Fig. 419.

Cover for Water Service.



Fig. 420.

Cover for Gas Service.



Fig. 421.

NET PRICES ON APPLICATION.

VALVE BOXES.

EXTENSION VALVE BOX.

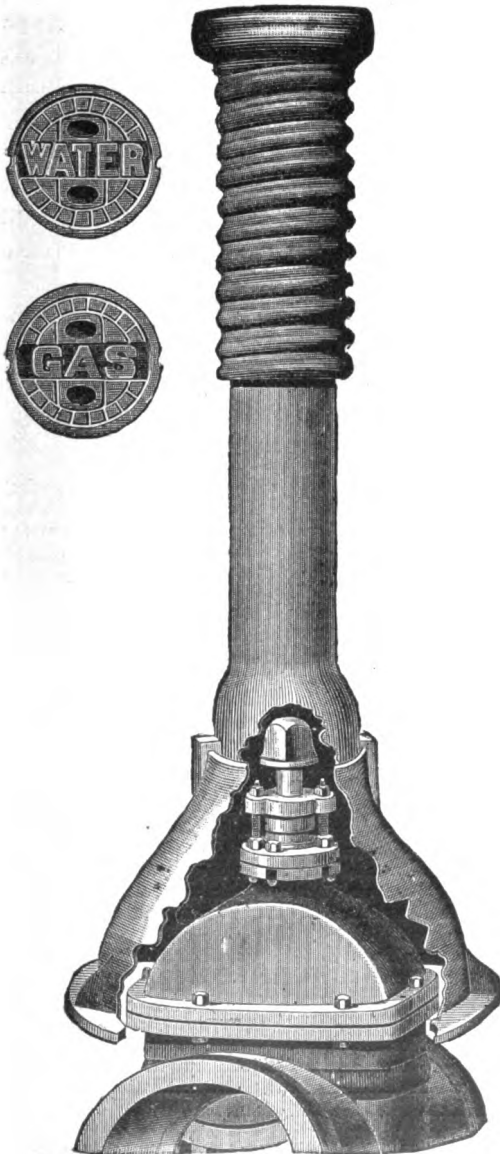


Fig. 422.

Directions for setting Valve Box.

When setting a valve box in its place, the base should rest two or more inches above the flanged joints of the valve dome. The nut of valve should be about on a line with the hub or upper part of the valve box base where connected with the upright shaft; this will leave ample space all around the valve and prevent the box from touching it in any way.

We recommend the use of a large size base over valves. In many places our No. 4 or No. 6 base is used on 16 in. valves and under; when such is the case the valves are covered by earth to within 12 inches of the top of the nut, the base of valve box completely protecting the working parts of the valve.

Length of Valve Box.

It is unnecessary to have the valve box quite as long as the depth of the main pipe, as the base of the box does not extend below the flange joint of valve dome, which is from 3 to 6 in. above the pipe.

Net Prices on Application.

MUELLER'S MACHINE FOR TAPPING WATER AND GAS MAINS While Under Pressure.

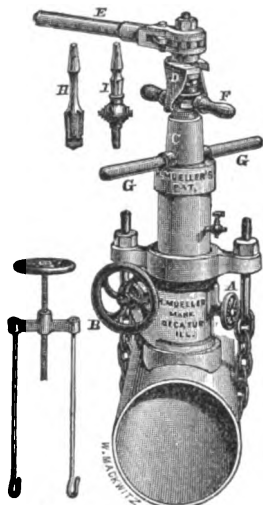


Fig. 423.

Any main can be tapped while under pressure without losing any water or gas, except what is contained in the cylinder of the machine, which will go out only when the tapping is done and machine taken off the main. The machine, weighing only 40 pounds, can be easily transported, and one man of ordinary intelligence can tap a main in fifteen minutes. Its simplicity and practicability recommend it at once to every one interested in gas or water works.

Each machine for water mains is furnished with one of each, $\frac{1}{2}$, $\frac{3}{8}$, $\frac{1}{4}$ and 1 inch Drills, Taps and Plugs for Corporation Cocks, Chain and Wrench; also four Gaskets, 4, 6, 10 and 12 inch, will be sent, unless otherwise ordered.

Each machine for gas mains is furnished with three iron saddles, one each, Tap and Drill combined, $\frac{3}{4}$, 1 and 1 $\frac{1}{4}$ inch; one each, Socket Wrench for $\frac{3}{4}$, 1 and 1 $\frac{1}{4}$ inch Pipe.

In ordering Tapping Machine, please state diameter of pipes used in your city.

Price, for Water Mains, each..... 100.00

Price, for Gas Mains, each..... 62.00

PAYNE'S MACHINE FOR TAPPING WATER AND GAS MAINS While Under Pressure.

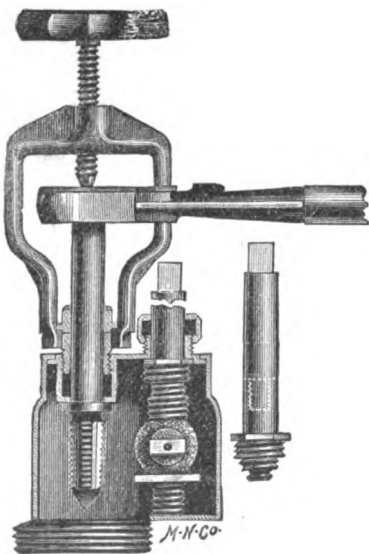


Fig. 424.

DIRECTIONS FOR OPERATING PAYNE'S TAPPING MACHINE.

Put the saddle on the main with the thick rubber gasket between it and the main. Fasten the saddle securely to the main by means of the chain. Be sure that the nuts are as far off the end of tightening bolts as possible, so that when screwed up the end of the bolt will not be in the way of screwing machine on to the saddle. Put the size tap you want to use into the machine, also the size cock to match it on the mandrel, and put this also in the machine; see that the cock is closed. Put the thin rubber gasket into the saddle and screw the machine on the saddle, turning to the left; screw it up tight by means of the iron handle on the machine, then turn the revolving head back to the right till it strikes the stop. Push the drill down till it rests on the pipe, put on the ratchet, and the yoke over the ratchet, and proceed with the drilling. When drilled and tapped, draw the drill up into the machine as far as possible. Screw on the lengthening piece to the mandrel, and revolve the head to the left till it strikes the stop. Push the cock into its place and screw it in by means of the mandrel just enough to be secure while taking off the machine. Loosen up and take off the machine, leaving the mandrel in the cock; screw the cock in tight with a wrench applied to the squares on the cock, and unscrew the mandrel from the cock.

Do not try to force the cock all the way in with the mandrel, as you are liable to strip the thread on mandrel.

PRICE LIST.

No. 0, complete with $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ inch Taps, and three Saddles.....	75.00
No. 1, complete with $\frac{3}{8}$, $\frac{1}{2}$ and $\frac{3}{4}$ inch Taps, and three Saddles.....	100.00
No. 2, complete with $\frac{1}{2}$, $\frac{3}{4}$ and 1 inch Taps, and three Saddles.....	125.00

PRICE LIST OF EXTRA TOOLS.

$\frac{1}{4}$ inch Taps, 2.00; $\frac{3}{8}$ inch Taps, 3.00; $\frac{1}{2}$ inch Taps, 4.00; $\frac{3}{4}$ inch Taps, 4.50; 1 inch Taps, 5.00; 1 $\frac{1}{4}$ inch Taps, 6.00; 1 $\frac{1}{2}$ inch Taps, 7.00; 2 inch Taps, 8.00; Mandrels (cast steel), 2.00; Saddles, 2.00; Chains and Bolts, 2.00.

HOSE REELS.

THE CYCLONE HOSE REEL.

Strong, Light, Handsome, Cheap, Simple, Saleable.

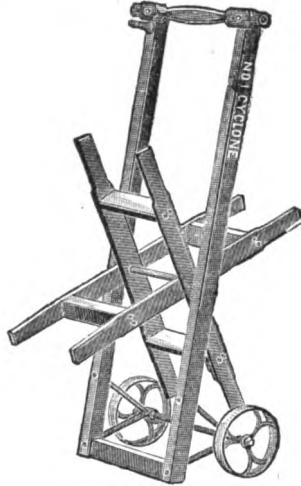


Fig. 425.

Price, No. 1, carries 100 feet $\frac{3}{4}$ in. Hose 1.50

This Reel is provided with a strong Iron Clasp to prevent Hose from unwinding, and has Wrought Iron Braces.

THE IMPROVED IDEAL HOSE REEL.

A Labor Saving and Hose Saving Invention.

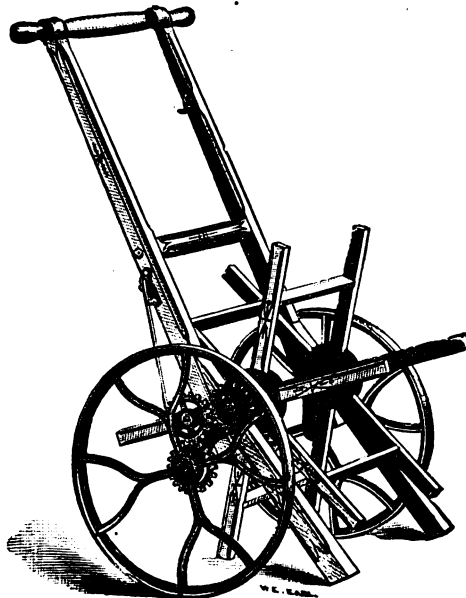


Fig. 426.

Price, capacity 100 feet $\frac{3}{4}$ in. Rubber Hose 4.50
 " " 200 " " " " 5.50

DESCRIPTION OF THE TRUCK.—It differs from all other reels, being provided with a Patent Gearing by means of which, when thrown into place, the hose can be wound up easily by simply pushing the truck over it as it lies on the ground. No handling of wet and dirty hose is necessary.

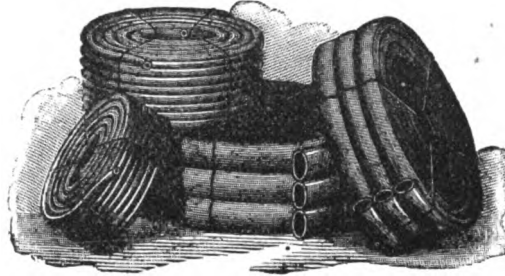


Fig. 427.

RUBBER HOSE.

2 Ply.		3 Ply.		4 Ply.	
Int. Diam.	Per Foot.	Int. Diam.	Per Foot.	Int. Diam.	Per Foot.
$\frac{1}{2}$ inch.....	0.20	$\frac{1}{2}$ inch.....	0.25	$\frac{1}{2}$ inch.....	0.30
$\frac{3}{4}$ ".....	.25	$\frac{3}{4}$ ".....	.30	$\frac{3}{4}$ ".....	.37
1 ".....	.33	1 ".....	.40	1 ".....	.50
$1\frac{1}{4}$ ".....	.42	$1\frac{1}{4}$ ".....	.50	$1\frac{1}{4}$ ".....	.62
$1\frac{1}{2}$ ".....	.50	$1\frac{1}{2}$ ".....	.60	$1\frac{1}{2}$ ".....	.75
$1\frac{3}{4}$ ".....	.58	$1\frac{3}{4}$ ".....	.70	$1\frac{3}{4}$ ".....	.87
2 ".....	.66	2 ".....	.80	2 ".....	1.00
$2\frac{1}{4}$ ".....	.75	$2\frac{1}{4}$ ".....	.90	$2\frac{1}{4}$ ".....	1.12
$2\frac{1}{2}$ ".....	.83	$2\frac{1}{2}$ ".....	1.00	$2\frac{1}{2}$ ".....	1.25

EXTRA HEAVY STEAM HOSE.—4 Ply.

Int. Diam.	Per Foot.	Int. Diam.	Per Foot.	Int. Diam.	Per Foot.
$\frac{1}{2}$ inch.....	0.51	$1\frac{1}{4}$ inch.....	1.04	2 inch.....	1.66
$\frac{3}{4}$ ".....	.67	$1\frac{1}{2}$ ".....	1.25	$2\frac{1}{2}$ ".....	2.08
1 ".....	.83	$1\frac{3}{4}$ ".....	1.45	3 ".....	2.80

Five and 6-ply Hose made at an advance of 25 and 50 per cent. respectively on 4-ply prices.

SUCTION HOSE.

Small Sizes on Galvanized or Tinned Iron Wire.

Int. Diam.	Per Foot.	Int. Diam.	Per Foot.	Int. Diam.	Per Foot.
$\frac{3}{4}$ inch.....	.77	$1\frac{1}{4}$ inch.....	1.25	$1\frac{3}{4}$ inch.....	2.10
1 ".....	1.00	$1\frac{1}{2}$ ".....	1.65	2 ".....	2.50

The above sizes made to order on Brass Wire at an advance of 10 per cent. on net prices.

SUCTION HOSE.

On Galvanized Iron Spiral or Tinned Iron Wire.

Int. Diam.	Per Foot.	Int. Diam.	Per Foot.	Int. Diam.	Per Foot.
$2\frac{1}{2}$ inches.....	3.10	5 inches.....	7.60	$7\frac{1}{2}$ inches.....	13.50
3 ".....	4.00	$5\frac{1}{2}$ ".....	8.50	8 ".....	15.00
$3\frac{1}{2}$ ".....	4.90	6 ".....	9.50	9 ".....	17.50
4 ".....	5.80	$6\frac{1}{2}$ ".....	10.50	10 ".....	20.00
$4\frac{1}{2}$ ".....	6.70	7 ".....	12.00	12 ".....	25.00

SMOOTH BORE SUCTION HOSE.

For use of Fire Departments, wrecking and mining purposes. This Suction is perfectly smooth, inside and out, is lighter, stronger and more durable than any heretofore in market, and is fully warranted in every particular.

Int. Diam.	Per Foot.	Int. Diam.	Per Foot.	Int. Diam.	Per Foot.
2 inches.....	2.60	5 inches.....	8.50	8 inches.....	16.50
$2\frac{1}{2}$ ".....	3.50	$5\frac{1}{2}$ ".....	9.50	9 ".....	19.50
3 ".....	4.50	6 ".....	10.50	10 ".....	22.50
$3\frac{1}{2}$ ".....	5.50	$6\frac{1}{2}$ ".....	12.00	12 ".....	27.50
4 ".....	6.50	7 ".....	13.50		
$4\frac{1}{2}$ ".....	7.50	$7\frac{1}{2}$ ".....	15.00		

HARD RUBBER SUCTION HOSE.—4 Ply.

Int. Diam.	Per Foot.	Int. Diam.	Per Foot.	Int. Diam.	Per Foot.
1 inch.....	0.75	$1\frac{1}{2}$ inch.....	1.13	2 inch.....	1.50
$1\frac{1}{4}$ ".....	.93	$1\frac{3}{4}$ ".....	1.31	$2\frac{1}{2}$ ".....	1.88

RUBBER STEAM PACKING.

CLOTH INSERTION—CLOTH ON EITHER OR BOTH SIDES.

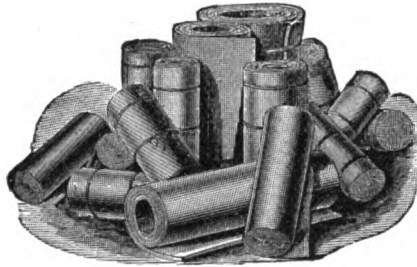


Fig. 428.

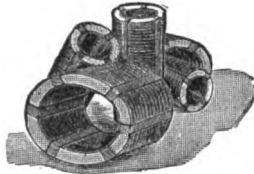
THICKNESS.		1-ply.	2-ply.	3-ply.	4-ply.
1-64 inch.....	per lb.	70 Cents.			
1-32 ".....	"	65 "			
1-16 ".....	"	60 "	63 Cents.	66 Cents.	
3-32 ".....	"	55 "	58 "	61 "	
1-8 ".....	"		55 "	58 "	61 Cents.
3-16 ".....	"			55 "	58 "
1-4 ".....	"				55 "

One ply of cloth for every 1-16 inch thickness.

Three cents additional per pound will be charged for each extra ply of cloth.

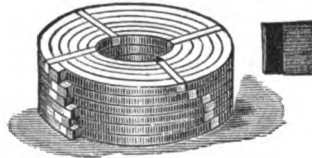
Each cloth, whether an insertion or on outside, to count as one ply.

CLOTH INSERTION GASKETS OR RINGS.—Fig. 429.



1-16 inch or less in thickness.....Price, per lb. 1.25 | 3-32 inch and upward.....Price, per lb. 1.00

ROUND AND SQUARE PISTON PACKING.—Fig. 430.



Made of cotton fabric and rubber core, from $\frac{1}{4}$ to $1\frac{1}{2}$ inch in diameter, and in lengths of 12 feet.....

Patent Solid Gum Back—Square Piston Packing, with <i>Solid Gum Back</i>	per lb., 85 Cents.
Pure Sheet Rubber or Valve Gum—Of superior quality and all thickness.....	per lb., 1.00
Pure Rubber Valves, Gaskets, Washers, Rings, etc.....	" 1.50

MISCELLANEOUS.

Italian Hemp A.....	per lb., .30	Usdurian Sheet Packing ..	per lb., .80
" " B.....	.25	Jenkins' ".....	" .80
Indian ".....	.20	Lamp Wick.....	" .30
Asbestos Rope.....	.75	Plumbago, Lubricant.....	" .35
" Wick.....	1.00	Cotton Waste, White.....	" $1\frac{1}{2}$
" Board.....	.50	" " Colored.....	" .10
Empire Packing Gum Core.....	1.00	Hair Felt.....	per square foot,
Soap Stone Packing.....	.25	Mineral Wool.....	per lb.,

TUBING.—Plain.

Int. Diam.	Per foot.	Int. Diam.	Per foot.
1-8 inch.....	.08	1-2 ".....	.25
3-16 ".....	.12	5-8 ".....	.30
1-4 ".....	.16	3-4 ".....	.35
5-16 ".....	.18	1 ".....	.45
3-8 ".....	.20		

OILERS AND LAMPS.

Locomotive Oilers.

Malleable Iron Lamp.



Fig. 431.

Malleable Iron Oiler.

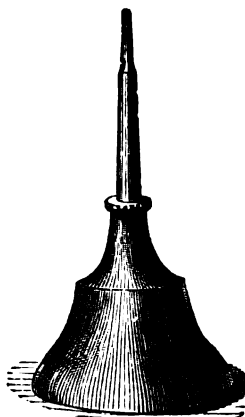


Fig. 432.

Price, No. 1	Malleable Iron Oilers, each	.50
" " 2	" " " " " "	.55
" " 3	" " " " " "	.60
" " 4	" " " " Hand Lamp, each	.50
" " 5	Locomotive Oilers, Tin, Pint, "	2.00
" " 6	" " " " Quart, each	2.75
" " 7	" " " " Brass, Pint, "	3.00
" " 8	" " " " " " Quart, "	4.00

DRAPER'S PATENT OILERS.

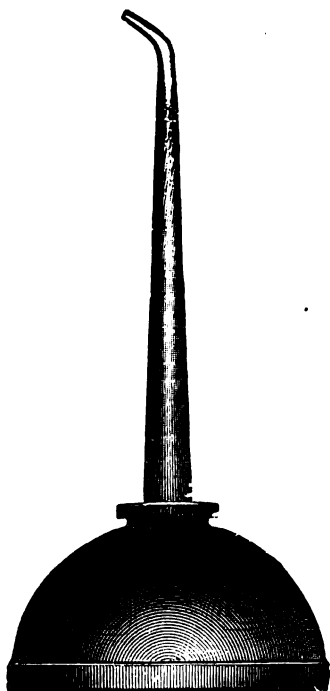


Fig. 434.

The nozzle of this oiler is made of the *best* malleable iron, drilled, turned, and case hardened at the point. The screws are machine cut, and fit perfectly, with a cavity in them to conceal the packing and prevent it from squeezing out and making it leak.

The shells are made of the *very best* Swede refined iron, stamped up, which makes them light, stiff, hard, and durable; wired around the base to prevent damaging should it accidentally fall and strike on the edge.

Fig. 434, each	.75
" 435, "	.50

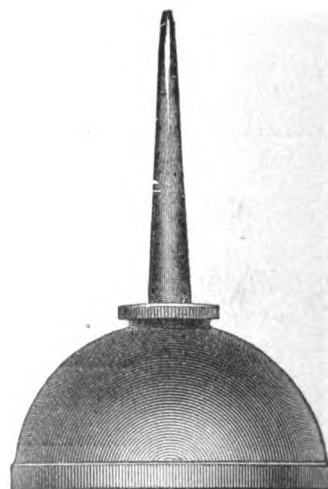


Fig. 435.

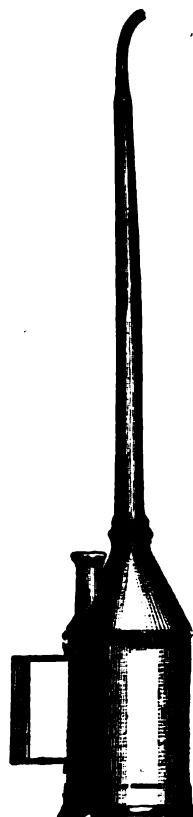


Fig. 433.

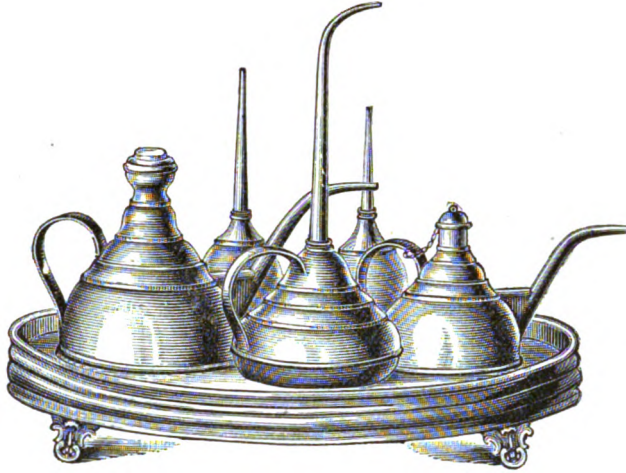
ENGINEERS' OILER SETS, TRAY AND DRAINER.

Fig. 436.

Size, $16\frac{1}{2} \times 11\frac{1}{2}$, Inside.

No. 4, Oblong Tray, 5 pieces, in Brass, each 11.00
 3 Oilers, 2 Cans.

BOILER MAKERS' HAND LAMPS.

Fig. 437.

Tin, Round, per doz..... 2.25 net.
 Tin, Oval, " 2.50 "

BRASS AND TIN ENGINEERS' SQUIRT OILERS.

All Sizes.

BRASS AND TIN OIL FILLERS.

Large. Medium. Small.

TUBULAR LANTERNS.**EXTRA HEAVY RAILROAD AND STEAMBOAT LANTERNS.**

NET PRICES ON APPLICATION.

OUTSIDE SQUARE LANTERNS.

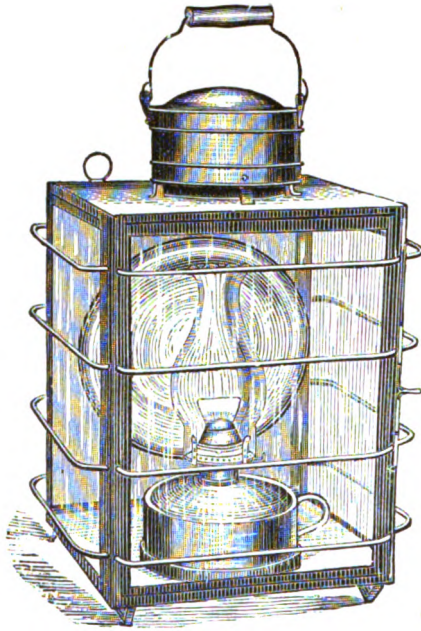


Fig. 438.

Heavy Steamboat and Mining Lantern.

For use on Boats, Freight Warehouses, Mines, &c., this Lantern has no equal. It is similar in style to the Square Lanterns, but is very heavy. It has Iron Rod Guards and Extra Large Reflector. Can be fitted to burn 300° fire test oils. One size only.

No. 2, 11x15 Glass, No. 2 Burner and Chimney, 10-inch Silvered Reflector, Fitted for Kerosene, each.....	5.00
Fitted for Mineral Sperm, &c.....	5.35

Painted Green, 6 in a Case.

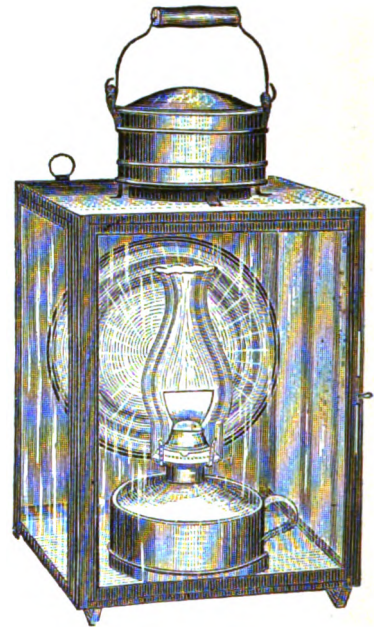


Fig. 439.

Specially for Outdoor Use.

Extra Heavy. Furnished with Storm or Weather Proof Top, Lamp, Silvered Reflector, and Glass fitted in Slides. Will burn in any situation possible for a Lantern. In quality and price they are unsurpassed.

No. 1, 8x12 Glass, No. 1 Burner and Chimney, 6-inch Silvered Reflector, complete, each.....	3.50
No. 2, 11x15 Glass, No. 2 Burner and Chimney, 8-inch Silvered Reflector, complete, each.....	4.50

Painted Dark Green, 6 and 12 in a Case.

OUTSIDE TRIANGLE LANTERNS.

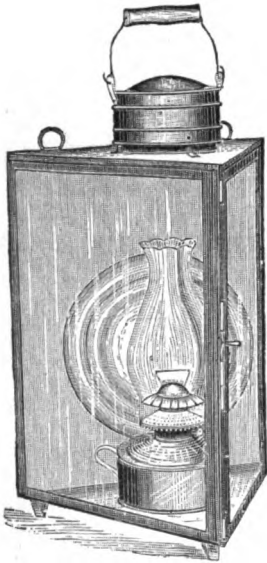


Fig. 440.

Specially for any Outdoor Use.

These lamps are made in all respects in the same manner as the Square Pattern, are very heavy and durable, and can be used in exposed positions equally with the Square Lamp.

No. 1, 10x14 Glass, No. 1 Burner and Chimney, 6-inch Silvered Reflector, complete, each.....	3.25
No. 2, 12x16 Glass, No. 2 Burner and Chimney, 7-inch Silvered Reflector, complete, each.....	3.75

Painted Green, 6 and 12 in a Case.

INSIDE TRIANGLE LANTERNS.

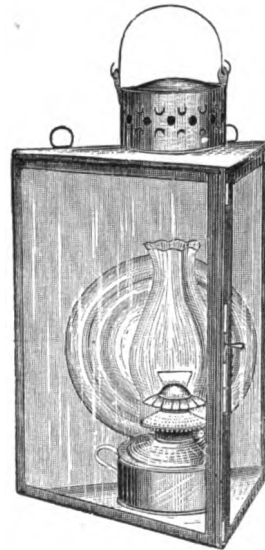


Fig. 441.

These Lanterns are designed to meet the demand for a cheaper Lantern than the "Outside" style. They are well and strongly made, but have the Open Top, and are unsuited for use in very exposed positions; but for Barns, Sheds, Engine Rooms or Mills—where not placed in strong draughts—they are First Class.

No. 1, 10x14 Glass, No. 1 Burner and Chimney, 6-inch Silvered Reflector, complete, each.....	2.50
No. 2, 12x16 Glass, No. 2 Burner and Chimney, 6-inch Silvered Reflector, complete, each.....	3.00

JAPANNED A HANDSOME BROWN.

Packed 6 and 12 in a Case.

METALS.



Fig. 442.

SOLDER.

GENUINE $\frac{1}{2}$ AND $\frac{1}{2}$ SOLDER.

Warranted Strictly Pure $\frac{1}{2}$ and $\frac{1}{2}$.

JAMES WALKER & SON'S REFINED SOLDER.

Fully equal in quality to the so-called $\frac{1}{2}$ and $\frac{1}{2}$ Solders on the market.

PLUMBERS' EXTRA WIPING METAL,

In Cake or Bar as desired.

SPELTER SOLDER FOR BRAZING BRASS AND COPPER.

BABBIT METAL.

GENUINE BABBIT, in 50-lb. Cases.

SEMPER IDEM BABBIT, in 50-lb. Cases.

A Hard Metal, equal in quality to the Genuine.

ANTI-FRICTION METAL, in 50-lb. Cases.

NO. 4 BABBIT, in 50-lb. Cases.

PIG TIN AND PIG LEAD, IN 25 OR 100-LB. PIGS.

Net Prices on above on application.

GALVANIZED SHEET IRON.

Numbers.....	10 to 20	21 to 24	25 and 26	27	28
List, per pound.....	.12	.13	.14	.15	.16

Discount.....

SOLDER POT.



Fig. 443.

Size, inches.....	5	6	9	12
Price, each.....	.50	.65	1.30	3.00

STRAP SOLDER MOULD.

Half Round Bar.

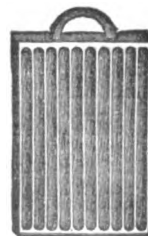


Fig. 444.

Price, each.....	3.00
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LEAD PIPE.

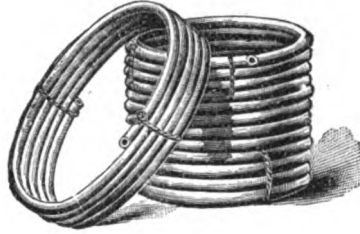


Fig. 445.

LIST OF SIZES AND WEIGHTS OF LEAD PIPE.

CALIBER.	WEIGHT PER FOOT.	CALIBER.	WEIGHT PER FOOT.	CALIBER.	WEIGHT PER FOOT.
	Lbs. Oz.		Lbs. Oz.		Lbs. Oz.
$\frac{1}{4}$ inch Tubing.....	6	$\frac{3}{8}$ inch Aqueduct.....	1 8	2 inch Waste.....	3
Fish Seine.....	15	Ex. Light.....	2	Ex. Light.....	4
$\frac{3}{8}$ inch Aqueduct.....	8	Light.....	2 8	Light.....	5
Ex. Light.....	9	1 inch Aqueduct.....	1 8	Medium.....	7
Light.....	11	Ex. Light.....	2	Strong.....	8
Medium.....	1	Light.....	2 8	Ex. Strong.....	9
Strong.....	1 8	Medium.....	3 4	Ex. ex. Strong..	10 8
Ex. Strong.....	2	Strong.....	4	$2\frac{1}{2}$ inch Waste.....	4
$\frac{1}{2}$ inch Aqueduct.....	10	Ex. Strong.....	4 12	Light.....	6
Ex. Light.....	12	Ex. ex. Strong..	5 8	3-16 thick.....	8
Light.....	1	$1\frac{1}{4}$ inch Aqueduct.....	2	$\frac{1}{4}$ thick.....	11
Medium.....	1 4	Ex. Light.....	2 8	5-16 thick.....	14
Strong.....	1 12	Light.....	3	$\frac{3}{8}$ thick.....	17
AA.....	2	Medium.....	3 12	3 inch Waste.....	3
Ex. Strong.....	2 8	Strong.....	4 12	Light.....	5
Ex. ex. Strong..	3	Ex. Strong.....	6	3-16 thick.....	9
$\frac{5}{8}$ inch Aqueduct.....	12	Ex. ex. Strong..	6 12	$\frac{1}{4}$ thick.....	12
Ex. Light.....	1 4	$1\frac{1}{2}$ inch Aqueduct.....	3	5-16 thick.....	16
Light.....	1 12	Ex. Light.....	3 8	$\frac{3}{8}$ thick.....	20
Medium.....	2	Light.....	4	$3\frac{1}{2}$ inch Waste.....	5
Strong.....	2 8	Medium.....	5	$\frac{1}{4}$ thick.....	15
Ex. Strong.....	3	Strong.....	6	5-16 thick.....	
Ex. ex. Strong..	3 8	Ex. Strong.....	7 8	4 inch Waste.....	5
$\frac{3}{4}$ inch Aqueduct.....	1	Ex. ex. Strong..	9	$\frac{1}{4}$ thick.....	16
Ex. Light.....	1 8	$1\frac{3}{4}$ inch Ex. Light.....	3 12	5-16 thick.....	21
Light.....	2	Light.....	4 8	$\frac{3}{8}$ thick.....	25
Medium.....	2 4	Medium.....	5 8	$4\frac{1}{2}$ inch Waste.....	6
Strong.....	3	Strong.....	6 8	5 inch Waste.....	8
Ex. Strong.....	3 8	Ex. Strong.....	8		
Ex. ex. Strong..	4				

SHEET LEAD.

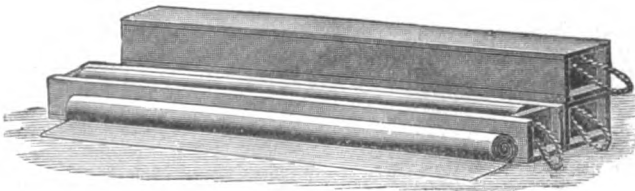


Fig. 446.

Sheet Lead of following weights per square foot: $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4, $4\frac{1}{2}$, 5, 6, 7, 8, 9, 10 lbs. and upward.

Pure Block Tin Pipe of all the usual sizes and weights.

PRICES ON APPLICATION.

Tools for Engineers, Steam Fitters and Plumbers.

I X L PIPE MACHINE.

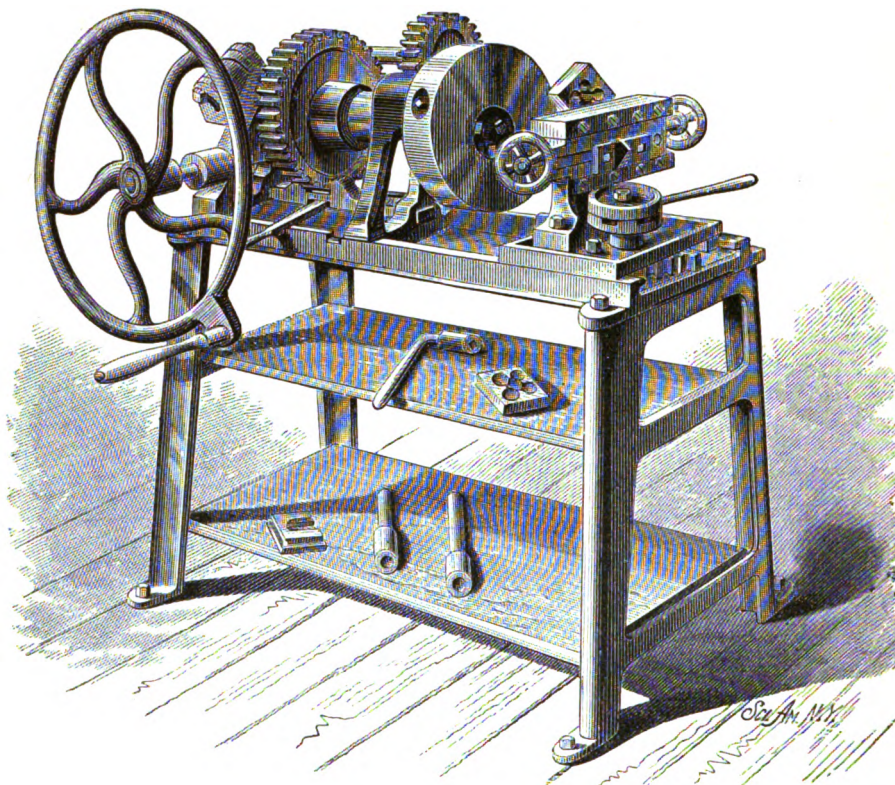


Fig. 447.

These Machines are offered as being Less Expensive, More Substantial, More Thoroughly Fitted, and Better Adapted to General Use than any in the Market.

Being aware of the need of a compact, durable, portable and cheap Machine for Cutting and Threading Pipe one-quarter to two inches, we have endeavored to supply the want. We offer this as a substitute for all others that have been sold by the trade, confident that we have a machine which will fill the place claimed for it. When a job of any magnitude is to be done, a large saving of labor is effected by this machine. It will be found that it is much easier on both dies and pipe, and also on workmen, than the ordinary way of cutting and threading. Three times the amount of work can be done on large sizes than by hand at the same time. Even one-quarter to three-eighths can be threaded and cut off much faster than by hand tools.

I X L HAND MACHINE.

Price, with set of right hand Solid Dies $\frac{1}{4}$ to 2 inch inclusive, Fly Wheel and set of Sockets for making nipples $\frac{1}{4}$ to 2 inch, complete..... 90.00

I X L POWER AND HAND MACHINE.

Price, with set of right hand Solid Dies, $\frac{1}{4}$ to 2 inch inclusive, Fly Wheel, Pulleys, Counter-shaft and set of Sockets for making nipples $\frac{1}{4}$ to 2 inch, complete..... 110.00

NO. 3 POWER MACHINE.

Price, complete with Solid Dies $\frac{1}{4}$ to 2 inch, and Cutter Dies $2\frac{1}{2}$ and 3 inch..... 425.00
 " " " " $\frac{1}{4}$ and $\frac{3}{8}$ inch, and Expanding Dies $\frac{1}{2}$ to 3 inch..... 600.00

NO. 4 POWER MACHINE.

Price, complete with Solid Dies 1 to 2 inch, and Cutter Dies $2\frac{1}{2}$ to 4 inch..... 525.00
 " " " Expanding Dies 1 to 4 inch..... 725.00

NO. 5 POWER MACHINE.

Price, complete with Solid Dies $1\frac{1}{4}$ to 2 inch, and Cutter Dies $2\frac{1}{2}$ to 6 inch..... 875.00
 " " " Expanding Dies $1\frac{1}{4}$ to 6 inch..... 1,100.00

NO. 6 POWER MACHINE.

Price, complete with Cutter Dies $2\frac{1}{2}$ to 8 inch..... 1,100.00
 " " " Expanding Dies $2\frac{1}{2}$ to 8 inch..... 1,200.00

PATENT SOLID DIE PLATE.

Loose Handles, Malleable Body, Japanned and Fitted with Brass Plates.



Fig. 448.

Number.....	0	1	1½	1¾	WITH LEADER SCREWS.		
					2	3	4
Dies furnished with Stock, inches.....	½ to ½	¼ to 1	¾ to 1¼	1 to 1½	1¼ to 2	2½ to 3	2½ to 3
Dimensions of Dies, inches.....	2 x ½	2½ x ¾	3 x ¾	3 x ¾	4 x ¾	5 x 1¼	5 x 1¼
Price, Stock, with R. H. Dies complete...	9.50	15.00	13.50	13.50	20.00	50.00	55.00
“ “ without Dies, each.....	3.50	5.00	6.00	6.00	9.50	25.00	33.00
“ extra R or L. “	1.50	2.00	2.50	2.50	3.50	9.00	9.00
“ “ Bushings, each.....	.25	.35	.45	.45	.60	1.00	1.00
“ Die Frames, “ .....		.30	.40	.40	.50	.60	.60

No. 4 Stock has Four Arms.

ARMSTRONG'S IMPROVED ADJUSTABLE STOCK AND DIES.

For Pipe and Bolts.



Fig. 449.

Number.....	1	2	3
	½ to ½	¼ to 1	1 to 2
Cuts Pipe, inches.....			
Price, Stock, with R. H. Dies, complete.....	9.00	12.00	24.00
“ “ without Dies, each.....	3.00	3.50	7.00
“ extra Right or Left Dies, each.....	1.25	1.50	4.00
“ “ Bushings, each.....	.25	.25	.50

JARECKI'S PATENT STOCK AND DIES.

With Adjustable Dies and Cut-off Knife.

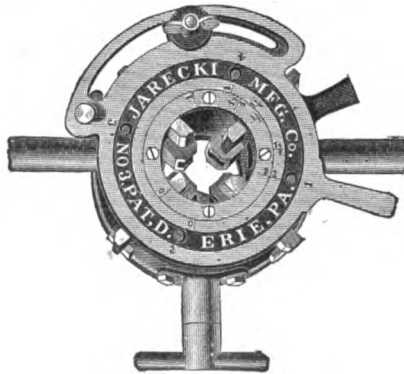


Fig. 450.

No. 1 Cuts and Threads, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$	14.00	No. 4A Cuts and Threads, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3.....	35.00
" 2 " " $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$	16.00	" 4B " " $2\frac{1}{2}$, 3, $3\frac{1}{2}$, 4.....	50.00
" 3 " " 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2.....	20.00	" 5 " " $4\frac{1}{2}$, 5, 6.....	75.00
" $3\frac{1}{2}$ " " $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{4}$, $1\frac{1}{2}$, 2.....	22.50		

Number.....	1	2	3	$3\frac{1}{2}$	4A	4B	5
Dies, per set, right or left hand, each.....	2.00	2.00	2.00	$\frac{2 \text{ Sets.}}{4.00}$	3.00	3.00	6.00
Knives, each.....	.40	.40	.40	.40	.50	.50	1.00

The Nos. 1, 2, 3 and 3½ have two handles, Nos. 4A and 4B have four handles, No. 5 has five handles.

PIPE TAPS AND REAMERS.

Fig. 451.



Fig. 452.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3
Price, Taps, each.....	1.12	1.25	1.50	1.87	2.50	3.12	3.75	4.62	6.25	10.50	15.00
Price, Reamers, each ...	1.12	1.25	1.50	1.87	2.50	3.12	3.75	4.62	6.25	10.50	15.00

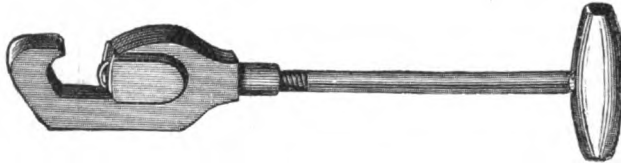
STANWOOD PIPE CUTTER.

Fig. 453.

Number.....	1	2	3
Cuts Pipe from	$\frac{1}{8}$ to $\frac{3}{4}$ in.	$\frac{3}{4}$ to 2 in.	2 to 3 in.
Price, Case Hardened, each.....	1.50	2.25	7.00
" Steel Faced, each.....	1.75	2.50	7.50
" Cutter Wheels, each .....	.12	.18	.25
" " Blocks and Wheels, each.....	.40	.60	1.00

SAUNDERS PIPE CUTTER.

Fig. 454.

Number.....	1	2	3
Cuts Pipe from.....	$\frac{1}{8}$ to 1 in.	1 to 2 in.	2 to 3 in.
Price, each	3.00	4.50	14.00
" Extra Block and Wheels, each.....	1.50	2.00	4.00
" " Wheels, each.....	.24	.32	.60
" " Rollers, each.....	.24	.32	.50

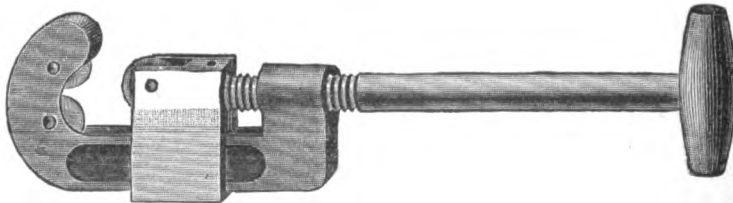
BARNES PIPE CUTTER.

Fig. 455.

Number.....	1	2	3	4	5
Cuts Pipe from	$\frac{1}{8}$ to 1 in.	$\frac{1}{2}$ to 2 in.	$1\frac{1}{2}$ to 3 in.	3 to 4 in.	4 to 6 in.
Price, each	4.50	6.00	10.00	20.00	30.00
" Extra Wheels, each.....	.25	.30	.40	.50	1.00
" " Wheel Pins, each.....	.10	.10	1 0	.10	.20

ROBBIN'S PATENT CHAIN TONGS.

Fig. 456.

Number	2	3	4	5	6	7
Length of Lever	27 in.	3 ft.	4 ft.	5 ft.	6 ft.	7 ft.
Takes Pipe from	1 to 2 in.	2 to 4 in.	2 to 6 in.	2½ to 8 in.	4 to 10 in.	6 to 12 in.
Price, each.....	5.50	6.25	9.00	12.50	16.00	30.00

BROCK'S PATENT CHAIN TONGS.

Fig. 457.

Size.....	No. 0.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
Price	2.50	3.50	5.50	7.50	11.00	18.00
Capacity	¼ to ¾ in.	⅝ to 1½ in.	¾ to 2½ in.	¾ to 4 in.	1½ to 8 in.	2 to 14 in.
Length	12½ in.	20 in.	27 in.	37 in.	50 in.	64 in.
Weight	1¼ lbs.	4¼ lbs.	8 lbs.	15 lbs.	28 lbs.	47 lbs.
Extra Chain, each...	.50	.60	.80	1.35	2.35	3.60
Extra Jaws, pair....	1.50	2.00	3.00	4.50	6.50	10.00

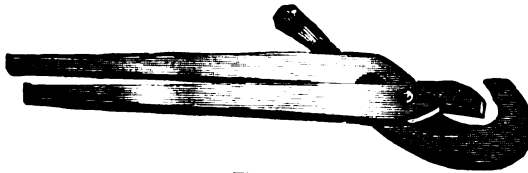
BROWN'S PATENT ADJUSTABLE TONGS.

Fig. 458.

Number	1	1½	2	3	4	5	6	7
Takes Pipe from...	⅝ to ¾ in	¾ to 1 in.	¾ to 1¼ in	1 to 2 in.	1½ to 3 in	2½ to 4 in	3 to 5 in.	4 to 7 in.
Price, each.....	1.30	1.65	2.00	3.00	6.00	11.00	25.00	35.00

COMMON PIPE TONGS.

Made Extra Heavy and Strong.



Fig. 459.

Size, inches	⅝	¾	⅞	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6
Price, each.....	.60	.65	.70	.75	.90	1.10	1.30	1.50	1.90	2.50	3.50	4.50	6.00	8.00	11.00

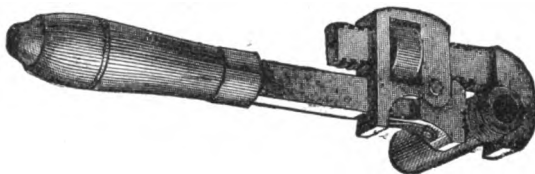
STILLSON'S PATENT PIPE WRENCH.

Fig. 460.

Length, open.....	6 in.	8 in.	10 in.	14 in.	18 in.	24 in.	36 in.	48 in.
Takes from.....	$\frac{1}{8}$ in. Wire to $\frac{1}{2}$ in. Pipe	$\frac{1}{8}$ in. Wire to $\frac{3}{4}$ in. Pipe	$\frac{1}{8}$ in. Wire to 1 in. Pipe	$\frac{1}{4}$ in. Wire to $1\frac{1}{2}$ in. Pipe	$\frac{1}{4}$ in. Wire to 2 in. Pipe	$\frac{1}{4}$ in. Wire to $2\frac{1}{2}$ in. Pipe	$\frac{1}{2}$ in. Pipe to $1\frac{1}{2}$ in. Pipe	1 in. Pipe to 5 in. Pipe
Price, each.....	2.00	2.00	2.25	3.00	4.00	6.00	12.00	18.00
Extra Frame.....	.25	.25	.33	.45	.55	.65	.75	1.00
Extra Nuts.....	.20	.20	.27	.35	.42	.50	.65	.80
Extra Jaws.....	.67	.67	.75	1.00	1.33	2.00	4.00	6.00

RATCHET DRILL.

Sleeve or Monitor Pattern.



Fig. 461.

Number.....	1	2	3	4
Length of Handle, inches.....	10	12	16	18
Price, each.....	10.50	13.50	16.00	19.00

BOILER RATCHET.

Fig. 462.

Number.....	1	2
Length of Handle, inches.....	10	12
Price, each.....	9.00	10.50

COE'S PATENT WRENCH.

Fig. 463.

Length, inches.....	6	8	10	12	15	18	21
Price, per doz.....	9.00	10.00	12.00	14.00	24.00	30.00	36.00

GAS PLIERS.

Fig. 464.

Size, inches.....	5	6	7	8	9	10	12	14
Price, each.....	.75	.75	.85	1.05	1.20	1.50	2.00	2.40

PIPE VISES. PATENT COMBINATION VISE.

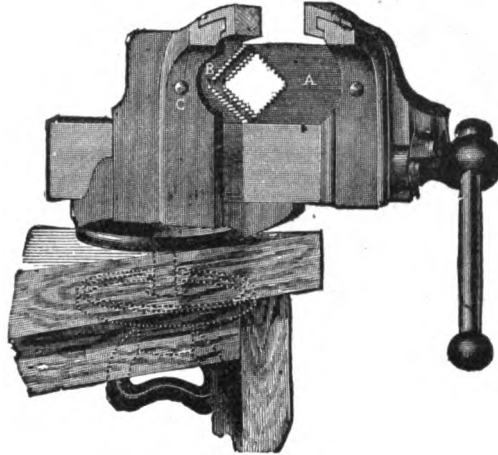


Fig. 465.

Price, Fig. 465, No. 1, holds $\frac{1}{8}$ to 2 inch Pipe, each.....	16.00
" " " 2, " $\frac{1}{8}$ " 3 " "	20.00

HINGED PIPE VISE. Malleable Iron.

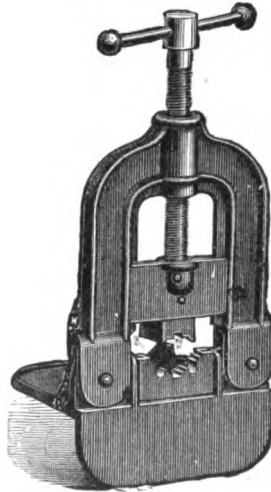


Fig. 466.

Price, Fig. 466, No. 1, holds $\frac{1}{8}$ to 2 inch Pipe, each.....	10.00
" " " 2, " $\frac{1}{4}$ " 3 " "	13.00
" " " 3, " 2 " 6 " "	30.00

DRILLS.

Flat, for Packer Sleeve Ratchet.



Fig. 468.

Size, inches.....	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1\frac{1}{8}$	$1\frac{1}{4}$	$1\frac{3}{8}$	$1\frac{1}{2}$
Price, each.....	.80	.80	.80	.90	.90	.90	1.00	1.10	1.20	1.30

Iron Pipe Size.

Size, inches.....	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	2
Price, each	1.35	1.35	1.80	2.35	2.80	3.20	3.80	4.60	5.50

TUBE CLEANERS.

"THE ENGINEER'S FAVORITE" FLUE SCRAPER.

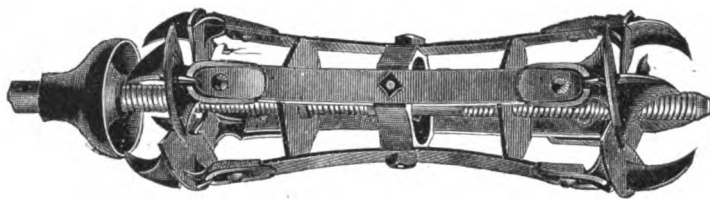


Fig. 469.

Outside Diameter of Tube, inches.....	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4
Price, each.....	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00

FLAT STEEL WIRE TUBE BRUSHES.

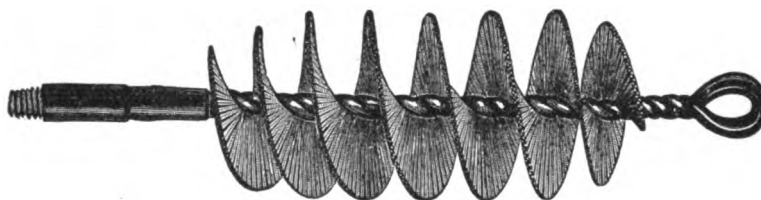


Fig. 471.

Outside Diameter of Tube, inches.....	1½	1¾	2	2¼	2½	2¾	3	3¼	3½	3¾	4
Price, each.....	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00

AUTOMATIC STEAM FLUE BLOWER.

Blows when inserted in Tube, closes instantly when removed.

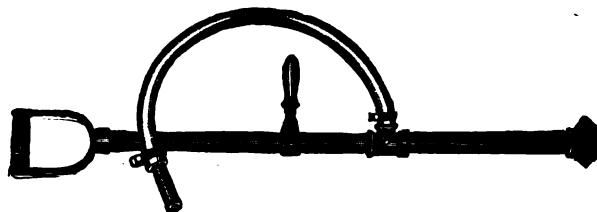


Fig. 472.

No. 1 fits Flues from 1 in. to 1½ in., price... 7.00	No. 3 fits Flues from 2¾ in. to 3¼ in., price... 9.00
" 2 " " " 1¾ " 2½ " " ... 8.00	" 4 " " " 3½ " 4½ " " ...10.00

The above is for Cleaner only. Globe Valves and Steam Hose furnished at the lowest market prices.
 No. 1 Cleaner requires ¾ inch hose. No. 3 Cleaner requires 1¼ inch hose.
 No. 2 " " 1 " No. 4 " " 1½ "

Besides the foregoing standard styles of cleaners, we carry a line of special-scrapers, viz: the
KELSEY, NATIONAL, FELTHOUSEN, ETC.

We can also furnish to order

REGULAR STEAM FLUE BLOWERS, (not Automatic,)

made of Iron Pipe and Fittings, any size.

PLUMBERS' GASOLINE FURNACE.

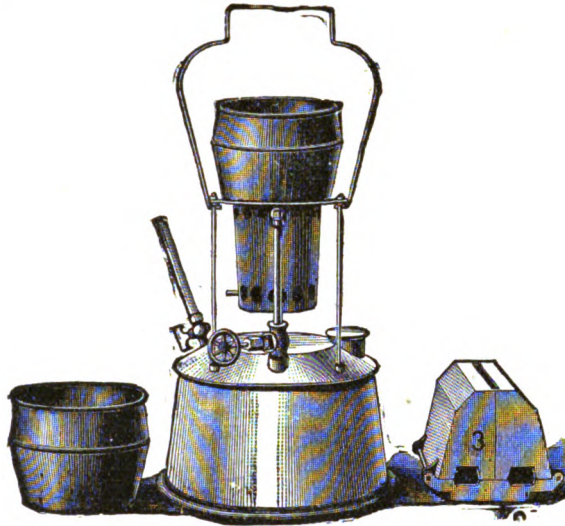


Fig. 473.

Price, each..... 10.00

The flame is a very steady, clear blue one, and the heat is very intense. By taking off the upper portion of furnace Soldering Irons can be easily heated. We guarantee every Furnace to give satisfaction. Use only 74° Deodorized Gasoline. See that the Outlet Valve and Air Cock are closed. Remove Filler Plug, and fill until gasoline appears in the hole. After blowing in through the Air Cock one full breath, close it, and the furnace is then charged ready for use. Open Valve enough to let gasoline flow and partly fill the Drip Cup; apply a match, and when the gasoline in Cup has nearly burned out, open the Needle Valve and allow the vapor to ignite at top of furnace.

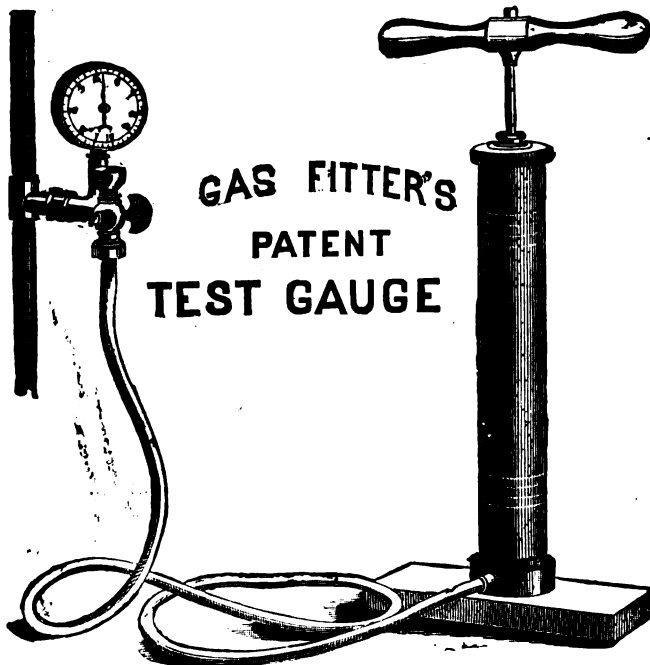


Fig. 474.

Price, each.....	30.00
" Ether Cup, extra.....	5.00
" Gauge only.....	12.00

PLUMBERS' TOOLS.

RASP.



Fig. 475.

Size, inches.....	10	12	14
Price, each.....	.40	.60	.80

CHISEL.



Fig. 481.

Price, each.....	.50
------------------	-----

FILE.



Fig. 476.

Size, inches.....	10	12	14
Price, Half Round, each.....	.40	.60	.80
Price, Flat, each.....	.40	.60	.80

GOUGE.



Fig. 482.

Price, each.....	.50
------------------	-----

CHIPPING KNIFE.



Fig. 477.

Size, inches.....	4½	5
Price, each.....	.40	.50

COLD CHISEL.



Fig. 483.

Price, each.....	.35
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SHAVE HOOK.



Fig. 478.

Price, each.....	.45
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CALKING CHISEL.



Fig. 484.

Price, each.....	.40
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HATCHET COPPER BOLT.

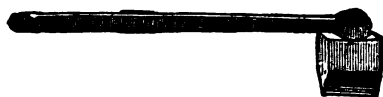


Fig. 479.

Price, per pound.....	.40
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FLOOR CHISEL.



Fig. 485.

Price, each.....	2.50
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POINTED COPPER BOLT.



Fig. 480.

Price, per pound.....	.40
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ROUND IRON.



Fig. 486.

Number.....	1	2	3
Price, each.....	.60	.75	.95

PLUMBERS' TOOLS.—Continued.

BOXWOOD DRESSER.



Fig. 487.

Price, each..... 1.00

COMPASS SAW.



Fig. 493.

Price, each..... .60

SIDE EDGE.



Fig. 488.

Price, each..... .50

CUTTING PLYERS.

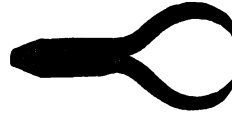


Fig. 494

Price, each..... 1.25

TURN PIN.



Fig. 489.

Number.....	1	2	3
Price, each.....	.20	.30	.40

HAMMER.



Fig. 495.

Price, each..... 1.00

DRIFT PLUG.



Fig. 490.

Price, 1 or 1 1/4 inch, each..... .25

BENDING PIN.

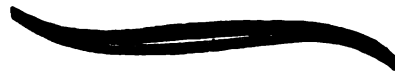


Fig. 496.

Price, each..... .25

BOSSING STICK.



Fig. 491.

Price, each..... 1.25

TAP BORER.



Fig. 497.

Price, each..... .45

PLUMBER'S SAW.

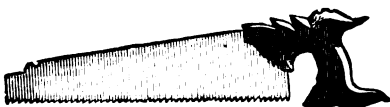


Fig. 492.

Size, inches.....	12	14
Price, Single Edge, each.....	.90	1.00
“ Double “ “	1.50	

BASIN WRENCH.



Fig. 498.

Price, each..... 1.75

PLUMBERS' TOOLS.—Continued.

SCREW DRIVER.



Fig. 499.

Price, each..... .50

POT HOOK.



Fig. 505.

Price, each..... .15

LADLE.



Fig. 500.

Size, inches..... 2½ 3 3½ 4 5 6
 Price, each..... .30 .40 .45 .50 .65 .90

SOIL CUP.



Fig. 506.

Price, each..... .40

BOXWOOD RULE.



Fig. 501.

Price, each..... .30

GREASE BOX.



Fig. 507.

Price, each..... 1.25

ANGULAR BORER.



Fig. 502.

Price, each..... 1.75

BLOW PIPE.

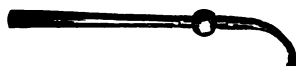


Fig. 508.

Price, each..... .50

PATENT RATCHET BRACE.



Fig. 503.

Price, each..... 2.25

TAPE MEASURE.

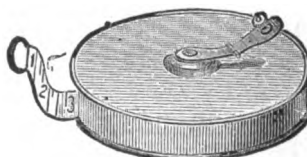


Fig. 509.

Price, each... 1.50

TORCH.

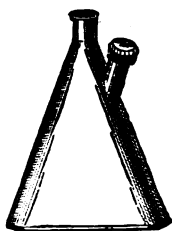


Fig. 504.

Price, Tin, each..... 1.00
 " Brass, each..... 1.25
 " Galloway Patent, each..... 1.50

COMPASS.

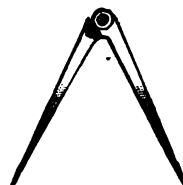


Fig. 510.

Price, each..... .45

PLUMBERS' TOOLS.—Continued.

PLUMBERS' HOOKS.



Fig. 511.

Price, per pound20

PLUMBERS' FORCE PUMP.

New Pattern Steam Metal.



Fig. 514.

Price, each 12.00

COPPER WIRE.

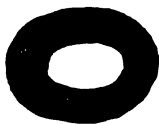


Fig. 512.

Price, per pound50

PLUMBERS' FORCE PUMP.

Steam Metal.



Fig. 515.

Price, each 10.00

WASHER CUTTER.

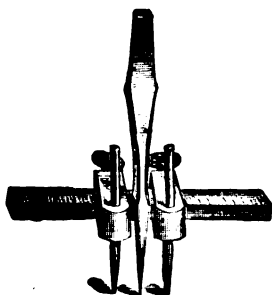


Fig. 513.

Price, each 1.25

RUBBER FORCE CUP.



Fig. 516.

Price, No. 1, each50
 " " 2, "75
 " " 3, " 1.00

PLUMBERS' TOOLS.—Continued.

TOOL BAG.



Fig. 516.

Price, Plain, each	4.50
Price, Leather Bottom, each.....	6.00
Price, Leather Bottom and Sides, each	7.00

WIPIING CLOTH.

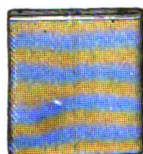


Fig. 517.

Price, Moleskin, per doz.....	2.75
Price, Ticking, per doz.....	1.50

"GRIFFIN'S" IMPROVED HACK SAW.

For Sawing Brass, Iron, Steel, Lead Pipe, and Metals of all kinds.

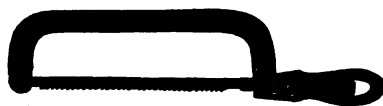


Fig. 518.

Size, inches.....	10	12
Price, each	2.00	2.50

HEMP OR OAKUM FOR CAULKING JOINTS.

Price, per 50 lb Bale Oakum	5.00
Price, per 50 lb. Bale Hemp.....	5.00

BOILER FEED OR PRESSURE PUMPS.

Arranged for Hot or Cold Water or other Liquids.

Many devices have been introduced in the market for feeding boilers, but nothing has yet proved so reliable and economical as a good Steam Pump.

All parts are made to gauge, and are therefore interchangeable.

These pumps have large direct water passages and full valve area, which admit of a speed that makes them very efficient fire pumps.

All sizes up to and including No. 6 have suction and delivery openings on both sides; consequently, connections can be made on either side of pump desired. When ordering a pump, please answer the following questions:

1st.—Whether for hot or cold water? 2d.—To what height is water to be lifted by suction? 3d.—Length of suction pipe? 4th.—Against what pressure or height is water to be forced? 5th.—Amount of water needed per hour?

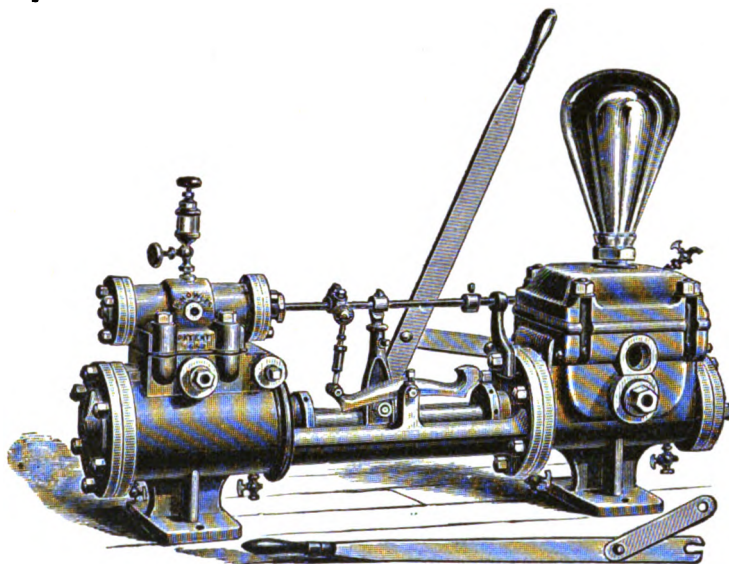


Fig. 519.

SIZES, CAPACITIES AND PRICES.

No.	Steam Cylinder, Inches.	Water Cylinder, Inches.	Stroke Inches	Gallons per Stroke.	*Capacity per Minute at Ordinary Speed.	Steam Pipe, Inches.	Ex- haust Pipe, Inches	Suction Pipe, Inches.	Deliv- ery Pipe, Inches	Floor Space Required, Inches.	Price.
000	2½	1½	3	.023	150 Strokes, 3½ gals.	¼	¾	½	¾	17 x 5	40
00	3	1¾	3	.031	150 " 4¾ "	¼	¾	¾	¾	18 x 5	55
0	3¼	2	4	.05	150 " 7½ "	½	¾	1¼	1	26 x 6	85
1	3½	2¼	4	.07	150 " 10½ "	½	¾	1¼	1	28 x 7	125
2	4	2½	5	.11	150 " 16½ "	½	¾	1¼	1	31 x 8	150
3	5	3¼	7	.25	125 " 31 "	¾	1	2	1½	44 x 13	200
4	5½	3¾	7	.34	125 " 42 "	¾	1	2	1½	45 x 14	225
4½	7	4	7	.39	125 " 49 "	1	1¼	2½	2	45 x 14	275
5	7	4½	10	.69	100 " 69 "	1	1¼	3	2½	55 x 16	350
6	7½	5	10	.85	100 " 85 "	1	1¼	3	2½	55 x 16	375
6½	8	5	12	1.02	100 " 102 "	1	1¼	4	4	67 x 19	400
7	10	6	12	1.47	100 " 147 "	1¼	1½	4	4	67 x 19	450
8	12	7	12	2.00	100 " 200 "	2	2½	5	5	67 x 20	525
9	14	8	12	2.61	100 " 261 "	2	2½	5	5	67 x 20	600
10	16	10	16	5.44	75 " 408 "	2½	3	6	6	80 x 22	800
11	18	12	24	11.75	50 " 588 "	3½	4	8	6	110 x 27	1200
12	20	14	24	16.00	50 " 800 "	3½	4	10	8	111 x 29	1500

LARGER SIZES ON HAND OR TO ORDER AT SHORT NOTICE.

* Twice the above capacities can be had in emergencies, but for continuous work, such as boiler feeding, we advise about half the speeds stated.

IMPROVED DUPLEX STEAM PUMPS.

Regular Inside Plunger Pattern.

To meet a preference occasionally expressed for a light, inexpensive Duplex Pump, to work against moderate pressure, with clear water, such as operating hydraulic elevators and pumping into the tanks of buildings, we have built a complete set of patterns embodying many decided improvements upon the Duplex Pumps commonly found in the market.

Plain slide valves are used of the most durable form, worked by a very simple and adjustable valve motion of improved design. The water plungers of these pumps are of the *inside* pattern, * and work through deep composition sleeves, bored to an accurate fit. The water valves are of ample area and adapted to the liquid to be pumped.

The weight of these pumps is from *ten to twenty* per cent greater than the duplex pumps as commonly built; they also have the advantage of *longer stroke*, and as the wear of a pump depends on the number of *reversals* of motion made in a given time, their durability is proportionately increased by this feature. Another great advantage in the longer stroke is the smaller amount of steam necessary, on account of less clearance, for a given amount of piston speed.

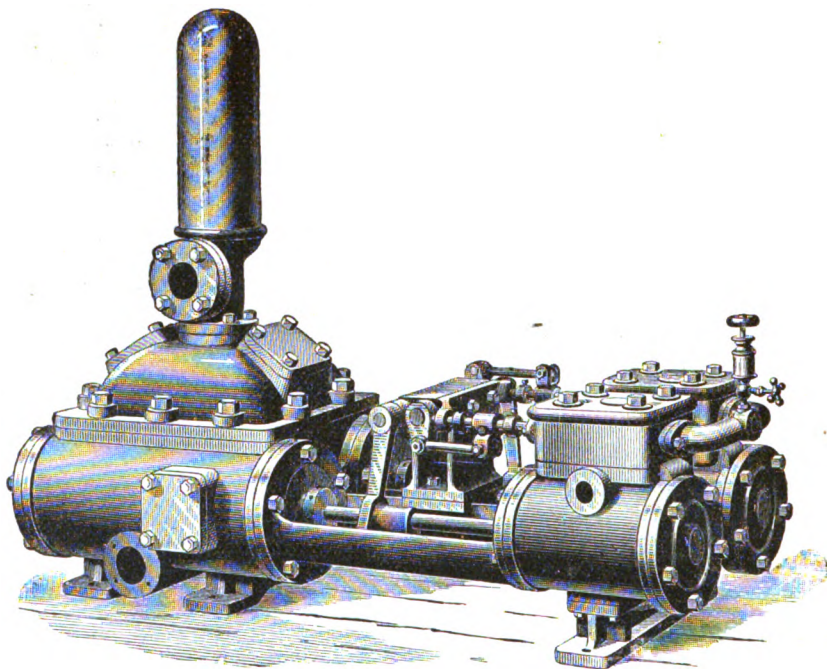


Fig. 520.

SIZES, CAPACITIES AND PRICES.

Steam Cylinders,	Water Plungers,	Stroke,	Gallons per Stroke, each Plunger	Strokes per Minute of each Plunger, Ordinary Speed.	Capacity of both Plungers at Speed Stated, (per Minute), Gallons.	Steam Pipe,	Exhaust Pipe,	Suction Pipe,	Delivery Pipe,	Floor Space requir'd	Price.
Inches.	Inches.	Inches.				Inches.	Inches.	Inches.	Inches.	Inches.	
3	2	3	.046	75 to 200	9 to 18	3	1 1/2	1	3/4	36 x 12	90
4 1/2	2 3/4	4	.10	75 to 150	15 to 30	3 1/2	2 1/2	1 1/2	1	38 x 13	125
5 1/2	3 1/2	6	.24	75 to 150	36 to 72	3 1/2	2 1/2	1 1/2	1 1/2	52 x 20	190
6 1/2	4	7	.39	75 to 125	53 to 97	4	3	2	2	54 x 24	220
7 1/2	4 1/2	10	.69	60 to 120	82 to 164	4 1/2	3 1/2	3	2 1/2	66 x 24	345
8	5	12	1.02	50 to 100	102 to 204	5	4	4	4	80 x 31	395
8	6	12	1.47	50 to 100	147 to 294	5 1/2	4 1/2	4	4	80 x 31	405
10	6	12	1.47	50 to 100	147 to 294	6	5	4	4	80 x 31	430
12	7	12	2.00	50 to 100	200 to 400	6 1/2	5 1/2	5	5	83 x 35	550
12	8 1/2	12	3.00	50 to 100	300 to 600	7	6	6	6	83 x 37	635
14	8 1/2	12	3.00	50 to 100	300 to 600	7 1/2	6 1/2	6	6	83 x 37	690
14	10 1/2	12	4.50	50 to 100	450 to 900	8	7	7	7	83 x 44	775
16	10 1/2	12	4.50	50 to 100	450 to 900	8 1/2	7 1/2	8	8	83 x 44	835
16	12	12	5.87	50 to 100	587 to 1174	9	8	8	8	83 x 50	975
18 1/2	10 1/2	12	4.50	50 to 100	450 to 900	9 1/2	8 1/2	8	8	83 x 44	890
18 1/2	12	12	5.87	50 to 100	587 to 1174	10	9	9	9	83 x 50	1035
18 1/2	14	12	8.00	50 to 100	800 to 1600	10 1/2	9 1/2	10	10	83 x 57	1150
20	14	18	12.00	40 to 70	960 to 1680	11	10	11	11		

Pumps fitted with COMPOSITION plungers and piston rods, 10 per cent. extra.

* Duplex Pumps, arranged with *Piston* pattern water cylinders instead of inside plungers, will be furnished without extra charge.

PITCHER SPOUT AND CISTERN PUMPS.



Fig. 521.



Fig. 522.

The above Pumps are so generally known and largely used, that it is unnecessary to describe them in detail. We would, however, state that in the manufacture of this class of Pumps we finish every part essential to a perfect working Pump. Each Cylinder is both *bored* and *highly polished*.

SIZES AND PRICES.

						Iron.	Brass-lined Cylinder.
No. 1—	2½	inch Cylinder, fitted for	1	inch Pipe.....		4.25	6.50
No. 2—	3	" " " " 1¼	"	" " " " " ".....		4.75	7.25
No. 3—	3½	" " " " 1¼	"	" " " " " ".....		5.25	8.00
No. 4—	4	" " " " 1½	"	" " " " " ".....		5.75	9.00
No. 5—	4½	" " " " 2	"	" " " " " ".....		6.25	10.00

Fitted for both Iron and Lead Pipe.

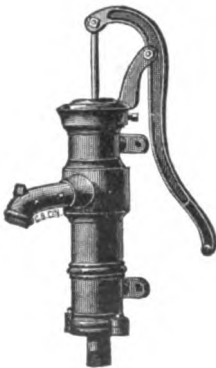


Fig. 523.



Fig. 524.

The above are considered the *Standard Cistern Pumps*, and are more in use than any other of their class. They only differ in size of Bases—Fig. 524 being the larger. To prevent freezing, trip the Valve by raising the Lever to its extreme height. Always fitted for both *Iron and Lead Pipe*.

SIZES AND PRICES.

No.	Size Cylinder.	Fitted for	Iron.	Brass Cylinder.
0	2 inch.	1 inch pipe.	3.50	5.50
1	2¼ "	1 " "	4.00	6.00
2	2½ "	1¼ " "	4.50	7.00
3	2¾ "	1½ " "	5.00	8.00
4	3 "	1¾ " "	5.50	10.00
5	3¼ "	1½ " "	6.50	13.00
6	3½ "	1½ or 2 "	8.00	18.00

IMPROVED ANTI-FREEZING WELL PUMPS.

With Wrought Iron Set Lengths.

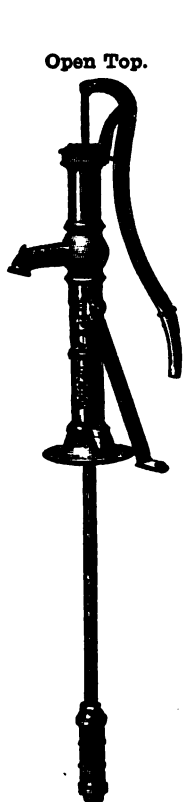


Fig. 525.

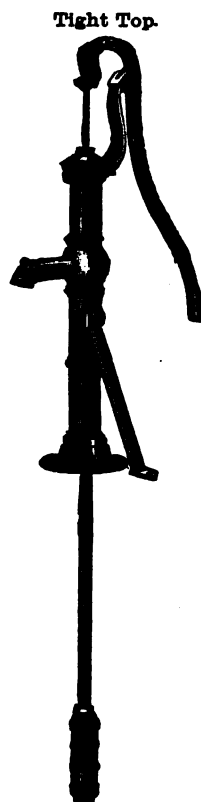


Fig. 526.

This style Pump is used largely in wells from twenty to thirty feet deep. The Cylinder is placed four feet below the base, and hole drilled in Pipe above the Cylinder, allowing the water to run out below the freezing point. The Pump is well made and nicely painted. No. 6 can be fitted with 2 inch Pipe and 4 x 12 Cylinder, and makes an excellent Stock or Farm Pump.

SIZES AND PRICES.

	Fig. 525.	Fig. 526.
No. 1—2¼ inch Bore, for 1 inch Suction Pipe.....	7.00	
No. 2—2½ " " " 1¼ " " "	7.50	8.25
No. 3—2¾ " " " 1¼ " " "	8.00	8.75
No. 4—3 " " " 1¼ " " "	8.50	9.25
No. 5—3¼ " " " 1¼ " " "	9.00	9.75

ANTI-FREEZING YARD WELL FORCE PUMPS.

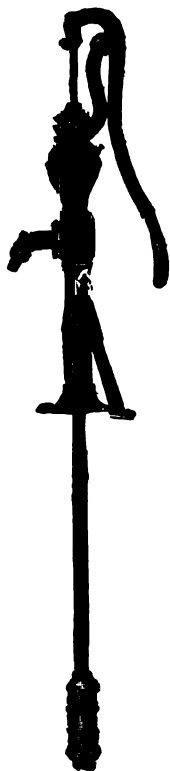


Fig. 527.

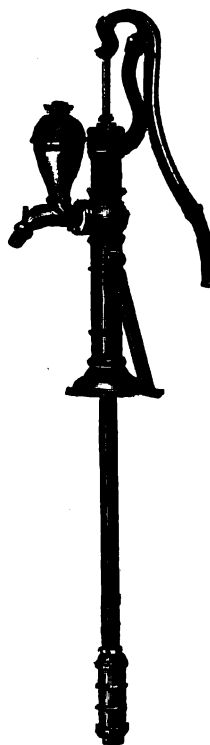


Fig. 528.

These are popular styles of Force Pumps. Both adapted for the same class of work where it is required to elevate the water. Fig. 528 has coupling for connecting the Pipe to top of Air Chamber.

SIZES AND PRICES.

	Fig. 527.	Fig. 528.
No. 3—2¾ inch Bore, for 1¼ inch Pipe.....	13.00	15.00
No. 4—3 " " " 1¼ " "	13.00	15.00
No. 5—3¼ " " " 1¼ " "	13.50	15.50
No. 6—3½ " " " 1½ " "	14.00	16.00

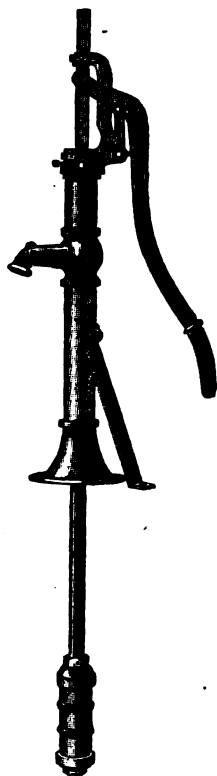
SPECIAL ANTI-FREEZING WELL PUMPS.**With Wrought Iron Set Length and Windmill Top.**

Fig. 529.



Fig. 530.

Fig. 530 is the most popular style made. It is fitted with Brass Stuffing Nut and Thumb Screw. It is easily worked, and used in wells not exceeding thirty feet deep. It is an excellent Pump for Watering Lawns, Washing Windows, or for Fire Protection. It is fitted for Hose Connection on Spout. It is fitted complete with Wrought Iron Set Length 4 feet from base, and hole drilled to allow water to run out below the freezing point.

SIZES AND PRICES.—Fig. 529.**With Iron Cylinders 44 inches High.**

No.	Diam. of Cylinder.	Size of Suction.	Stroke of Pump.	Price.
1	2¼ inches.	1 inch.	6 inches.	8.50
2	2½ "	1¼ "	6 "	8.75
3	2¾ "	1½ "	6 "	9.00
4	3 "	1¾ "	6 "	9.25
5	3¼ "	1½ "	6 "	9.75
6	3½ "	1½ "	6 "	.....
8	4 "	2 "	6 "	.....

SIZES AND PRICES.—Fig. 530.

No. 2—2½ inch Cylinder, 1¼ inch Suction Pipe.....	13.00
No. 3—2¾ " " 1½ " " " ".....	13.25
No. 4—3 " " 1¾ " " " ".....	13.50
No. 5—3¼ " " 1½ " " " ".....	14.00

WINDMILL LIFT PUMP STANDARD

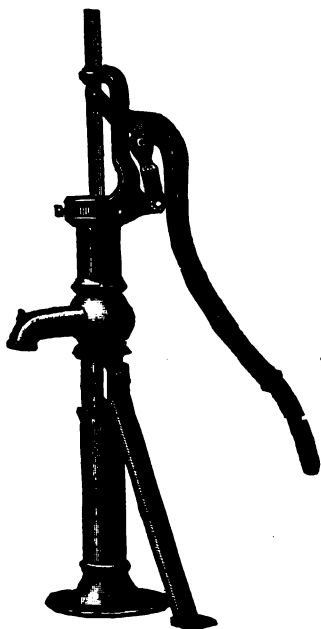


Fig. 531.



Fig. 532.

SIZES AND PRICES.

Fig. 531.

Size.....	6 in. Stroke.	10 in. Stroke.
No. 4.....	7.00	.....
No. 5.....	8.00	9.50.

Fitted for 1½ Pipe unless otherwise specified.

SIZES AND PRICES.

Fig. 532.

No. 1 Complete, 6 inch Stroke, Tapped for 1½ inch Suction Pipe.....	10.00
No. 1 Complete, 10 inch Stroke, Tapped for 2 inch Suction Pipe.....	11.50

Fitted as above unless otherwise ordered. Can be fitted for 1, 1½ or 2 inch Suction Pipe when so ordered.

PATENT ANTI-FREEZING WIND-MILL FORCE PUMP STANDARD.

Fitted to withdraw Plunger.

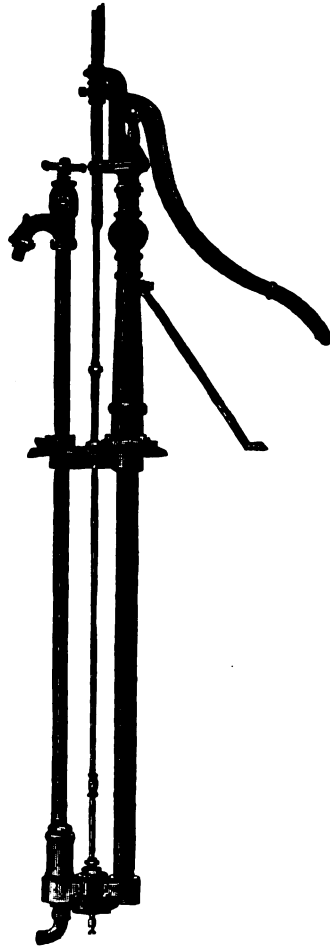


Fig. 533.

No. 1.

Price, 6 inch Stroke, $1\frac{1}{4}$ inch Pipe, Air Chamber, and tapped for $1\frac{1}{4}$ inch Pipe Connections.....	16.00
" 10 " $1\frac{1}{4}$ " " " " 2 " "	17.50

No. 2.

Price, 6 inch Stroke, 2 inch Pipe, Air Chamber, and tapped for $1\frac{1}{4}$ inch Pipe Connections.....	18.00
" 10 " 2 " " " " 2 " "	19.50

This Standard or Three-Way Pump has given excellent satisfaction. We recommend the No. 2 Pump, 2 x 10, for tubular wells. The valve in this Pump is very simple, but strong and durable.

For Cylinders suitable for this Standard, see page 162.

IMPROVED HAND FORCE PUMPS.

. With Adjustable Lever, Air Chamber and Brass Piston Rod. With Cock on Spout.



Fig. 534.
ON BASE.

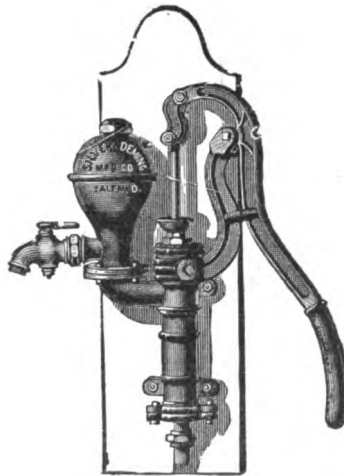


Fig. 535.
ON PLANK.

Above shows a well-known style of Hand Force Pump, with connections on top of Air Chamber, if it is desired to elevate the water.

SIZES AND PRICES.

	Iron.	Brass Cyl.	* Brass.
No. 1.—2 inch Bore, for 1 1/4 inch Pipe.....	11.00	16.50	22.00
No. 2.—2 1/2 " " 1 1/4 "	12.50	18.00	23.50
No. 3.—3 " " 1 1/4 "	14.50	19.50	35.00
No. 4.—3 1/2 " " 1 1/2 "	21.50	29.50	43.50
No. 5.—4 " " 2 "	22.50	35.50	52.50

* All Brass except Air Chamber, Lever, Fulcrum and Base.

PUMP CYLINDERS.



Fig. 538.

Size.	* Fitted for	Iron.	Brass Body.
2 x 10	1 inch Pipe.	3.75	7.25
2½ x 10	1 " "	4.00	7.50
2¾ x 10	1¼ " "	4.35	8.00
3 x 10	1¼ " "	4.70	8.75
3¼ x 10	1½ " "	5.00	9.50
3½ x 10	1½ " "	5.30	10.50
3¾ x 10	1½ " "	5.60	11.50
4 x 10	2 " "	5.90	13.00
		6.50	14.00

* Fitted for other sizes of Pipe when so ordered.

SHALLOW WELL CYLINDERS.



Fig. 539.

Size.	* Fitted for	Iron.	Brass Body.	Brass Body and Plunger.	All Brass.
2 x 12	1 inch Pipe.	5.50	10.00	11.00	12.50
2½ x 12	1¼ " "	5.75	10.50	11.50	13.00
2¾ x 12	1¼ " "	6.00	11.50	12.50	14.00
3 x 12	1¼ " "	6.50	11.75	13.25	15.00
3¼ x 12	1½ " "	7.00	12.75	14.25	16.25
3½ x 12	1½ " "	7.50	14.00	15.00	17.50
3¾ x 12	1½ " "	8.00	15.50	17.50	20.00
4 x 12	2 " "	8.50	18.00	20.50	23.50
2 x 14	1 " "	9.25	21.50	24.00	27.00
2½ x 14	1¼ " "	6.00	10.25	11.50	13.00
2¾ x 14	1¼ " "	6.25	11.25	12.50	14.00
3 x 14	1¼ " "	6.50	11.75	13.00	14.50
3¼ x 14	1½ " "	7.00	12.50	14.00	15.75
3½ x 14	1½ " "	7.50	13.50	15.00	16.75
3¾ x 14	1½ " "	8.00	15.00	16.75	18.25
4 x 14	2 " "	8.50	16.50	19.00	21.50
4½ x 14	2 " "	9.00	20.25	22.75	25.00
5 x 14	2½ " "	10.00	23.75	27.00	29.50
		12.50	26.00	31.00	34.00
		14.25	29.00	35.00	39.00

The Brass Body and All Brass Cylinders are made of *Cast Brass*.

* Fitted for other sizes of Pipe when so ordered.

BRASS TUBE WINDMILL CYLINDERS.



Fig. 539.

Size.	Fitted for	Iron Att.	All Brass.	Size.	Fitted for	Iron Att.	All Brass.
2¼ x 10	1¼ inch Pipe.	7.75	8.50	2¼ x 14	1¼ inch Pipe.	9.75	13.00
2½ x 10	1¼ " "	8.00	8.75	3 x 14	1¼ " "	10.25	13.50
2¾ x 10	1¼ " "	8.50	9.25	3½ x 14	1½ " "	12.25	16.25
3 x 10	1¼ " "	9.00	10.00	4 x 14	2 " "	15.75	21.50
3½ x 10	1½ " "	10.50	12.00	2 x 16	1 " "	9.00	12.00
4 x 10	2 " "	14.00	16.00	2¼ x 16	1¼ " "	9.75	12.75
2¼ x 12	1¼ " "	8.25	9.25	2½ x 16	1½ " "	10.25	13.25
2½ x 12	1¼ " "	8.50	9.50	2¾ x 16	1½ " "	10.75	13.75
2¾ x 12	1¼ " "	9.00	10.00	3 x 16	1½ " "	11.25	14.75
3 x 12	1¼ " "	9.50	11.00	3¼ x 16	1½ " "	12.00	16.00
3½ x 12	1½ " "	11.25	13.50	3½ x 16	1½ " "	13.50	18.50
4 x 12	2 " "	15.00	18.50	4 x 16	2 " "	17.50	24.00
2¼ x 14	1¼ " "	9.00	11.75	5 x 16	2½ " "	24.00	36.00
2½ x 14	1¼ " "	9.25	12.00				

We make these Cylinders with Inside Caps for Drilled Wells at same list prices when so ordered.

DEEP WELL CYLINDERS. "C" PLUNGER.

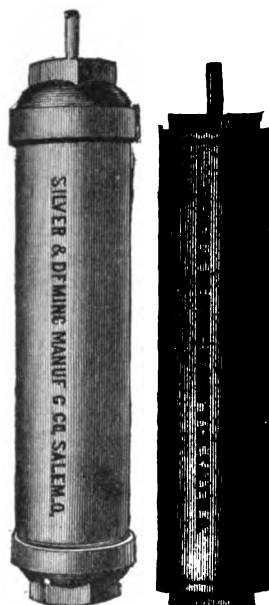


Fig. 540.

Fig. 541.

Size.	Fitted for Pipe.	Iron.	Brass Body.	Brass Body and Plunger.	All Brass.
1½ x 16	1 inch.	6.00	10.50	12.00	13.50
1¾ x 16	1 "	6.00	10.50	12.00	13.50
2 x 16	1 "	6.00	10.50	12.00	13.50
2¼ x 16	1¼ "	6.50	12.00	13.50	15.00
2½ x 16	1¼ "	7.00	12.50	14.00	15.00
2¾ x 16	1¼ "	7.50	13.00	14.50	16.25
3 x 16	1¼ "	8.00	14.00	15.50	17.50
3¼ x 16	1¼ "	8.50	16.00	18.00	20.00
3½ x 16	1½ "	9.00	18.50	21.00	23.40
4 x 16	2 "	10.50	26.00	29.00	32.50
4½ x 16	2 "	13.00	30.00	35.00	40.00
5 x 16	2½ "	15.50	35.00	41.00	48.00
6 x 16	3 "	22.00	41.00	49.00	60.00

CHAPMAN VALVES.



Fig. 542.

Chapman's Valves, Size, Inches.....	2	2½	3
Price, per set	6.00	9.00	12.00

DEEP WELL VALVES.

With Flat Rubber Seats. Same price as above.

FLOAT VALVES.



Fig. 543.

Fitted for ¾ or 1 inch Pipe, each.....	1.00
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ROD COUPLINGS.

For 7/8 or 3/8 Iron Rod.....	Net.
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RADIAL CENTER BRASS JACKET DRIVE WELL POINTS.



Fig. 544.

This cut shows the Radial Centre wound with heavy galvanized wire, ready for putting on the wire gauze and Brass Jacket. A 2-foot point of this kind will supply more water than any 3-foot point made of pipe.

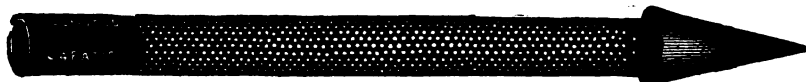


Fig. 545.

(This cut shows the Finished Point.)

In these points there is no possible chance for the wire gauze to be clogged up on the under side with clay or any other substance.

For Brass Jacket Points made of pipe, see below.

While it costs a little more to make Radial Center Points than same size pipe points, you get a point with more than *four times* as much water surface under the gauze as you can get in any pipe point made, and this fact makes Radial Center Points the cheapest to buy of any point in the market.

1 1-4 INCH POINTS.

20 inches Long, 14 inch Jacket.....	30.00	36.00	42.00	48.00
2 feet " 18 " "	36.00	45.00	52.00	58.00
2½ " " 24 " "	45.00	56.00	64.00	70.00
3 " " 30 " "	54.00	68.00	80.00	86.00

BRASS JACKET POINTS FOR TUBULAR WELLS, WITH FLUSH POINTS.



Fig. 546.

This Point is so constructed that it can be driven from the inside. The plug is securely riveted to the pipe.

We allow 18 inches of blank pipe beyond the Brass Jacket on 1 inch points, and 12 inches on 1½ points. If longer blanks are needed they can be furnished at the cost of additional pipe required.

1 1-4 INCH POINTS GALVANIZED FOR TUBULAR WELLS.

3 feet Long, 24 inch Jacket, 130 Holes.....	49.00	60.00	68.00	74.00
3½ " " 30 " " 160 "	58.00	72.00	84.00	90.00
4 " " 36 " " 200 "	67.00	84.00	96.00	108.00
4½ " " 42 " " 230 "	76.00	94.00	110.00	120.00
51 in. " 24 " " 130 "	58.00	68.00	76.00	82.00
57 " " 30 " " 160 "	66.00	80.00	92.00	98.00

LIST OF BRASS JACKET POINTS MADE OF GALVANIZED PIPE.



Fig. 547.

1½ Inch Points—Galvanized.	PRICES BY THE DOZEN.			
	No. 60 Gauze.	No. 80 Gauze.	No. 90 Gauze.	No. 100 Gauze.
20 inches Long, 14 inch Jacket, 80 Holes.....	30.00	36.00	42.00	48.00
2 feet " 18 " " 100 "	36.00	45.00	52.00	58.00
2½ " " 24 " " 125 "	45.00	56.00	64.00	70.00
3 " " 30 " " 150 "	54.00	68.00	80.00	86.00
3½ " " 36 " " 175 "	64.00	80.00	92.00	100.00
4 " " 42 " " 200 "	72.00	90.00	105.00	116.00
4½ " " 48 " " 250 "	81.00	104.00	122.00	134.00
5 " " 54 " " 300 "	90.00	114.00	128.00	146.00
6 " " 66 " " 325 "	102.00	130.00	145.00	166.00

TIN SPEAKING TUBE.

1 inch, in 5 foot Lengths, per foot.....	.05
--	-----

ELBOWS.

1 inch, each.....	.05
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SPEAKING TUBE WHISTLES.

Nickel Plated.

With Indicator, per doz.....	7.00
Without Indicator, per doz.....	6.00

PORCELAIN MOUTHPIECE.

Japanned Body.

With indicator, per doz.....	4.50
Without Indicator, per doz.....	4.00

SODA AND MINERAL WATER APPARATUS.

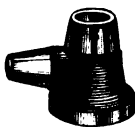


Fig. 548.

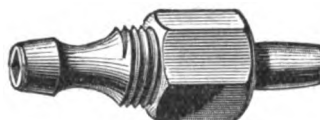


Fig. 549.

CLAMP JOINTS.

Silver Plated.

With Strainer, all sizes, Fig. 548.....	.50
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PIPE COUPLINGS.

Finest Quality, Silver Plated, Tin Lined.

Small, for Tin Pipes, each, Fig. 549.....	.50
Large, for Lead Pipes, each.....	75 to 1.50

PURE BLOCK TIN PIPE.



Fig. 550.

$\frac{1}{4}$ inch Internal Diameter, per foot.....	.15
$\frac{3}{8}$ inch Internal Diameter, per foot.....	.25

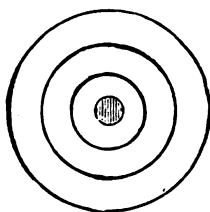


Fig. 551.

MACHINE CUT WASHERS.

Something that will be appreciated by all who have experienced the vexation of leaky joints, imperfectly packed.

In proper size for couplings, syrup cans, etc., per doz.....	.25
Large, for fountain cocks .....	.35

Any size furnished to order.

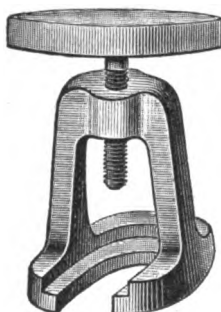


Fig. 552.

MALLEABLE IRON CLAMPS.

Japanned.....	.75
Wrought Iron Spanner Wrench.....	.50

Also Gauges, Valves, Fountain Cocks, Glass and "Silver" Syphons, Draught Tubes, etc.

COPPER SODA FOUNTS.

Pure Tin Lined.

6 Gallon.....	30.00	10 Gallon.....	40.00	14 Gallon.....	50.00
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SODA COOLERS.

With Pipe and Coupling.

10 x 2 }	3.00	18 x 3 }	3.50
12 x 2 }		20 x 3 }	
14 x 2 }		22 x 3 }	
12 x 3 }	3.25	24 x 3 }	4.50
14 x 3 }		26 x 3 }	
16 x 3 }		27 x 3 }	

SYRUP CANS, block tin or tinned copper, any size or style to order.

SYRUP FAUCETS, any size or style to order.

We make a Specialty of

RE-LINING COPPER SODA FOUNTS.

Pure Block Tin Only. Prices Defy Competition.

6 Gallon.....	4.50	10 Gallon.....	5.00	14 Gallon.....	5.50
---------------	------	----------------	------	----------------	------

Special prices on larger lots. Steel Founts re-lined with Sheet Block Tin. Coolers and Syrup Cans re-tinned perfectly. Vitriol and Marble Chambers fitted with new Lead Linings and Valves. Leaky Valves, Draught Tubes, etc., repaired.

CONE TOPS.**Black Iron.**

Size, inches.....	5	6	7
Price.....	1.50	2.00	2.50

SMOKE JACKS.**Ventilator.**

Size, inches.....	5	6	7	8
Price, Black Iron.....	6.00	7.00	8.00	9.00
“ Galvanized Iron.....	7.50	8.50	9.50	10.50

BOAT PUMPS.

Size.....	10 Ft.	12 Ft.
Price, 3 inch, Galvanized.....	13.00	15.00
“ 3 “ Tin.....	11.00	13.00

COPPER BILGE STRAINER.

Size.....	6 x 10	7 x 10	8 x 12	9 x 14
Price.....	6.00	8.00	10.00	12.00

ASH BUCKETS.**Extra Heavy Sheet Iron with Wrought Bands and Handles.**

Size.....	14 x 22	15 x 24	17 x 26
Price.....	14.00	16.00	18.00

ASH PAILS.

Price, each.....	3.50
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